Clinical Lectures
ON THE
NERVOUS MIMICRY OF ORGANIC DISEASES,

Delivered at St. Bartholomew's Hospital,

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LECTURE II.

GENTLEMEN,—In the last lecture I spoke generally of the characters of the nervous constitution commonly observed in those who suffer with the mimicries of organic diseases. You may believe that, however much the circumstances of a life may favour the development of such a constitution, it would not be well marked unless it were inherited. And facts relating to inheritance deserve great weight in the diagnosis of any doubtful case of nervous mimicry.

In looking for indications of this inheritance you may not find that, in the same family, there are or have been many cases of similar mimicry of disease; but it is a fact of not less weight if, in the same family, various other forms of nervous disorders—especially of such as are, for convenience, called functional disorders—have been observed. Thus, among the relatives of those with neuromimesis it is common to find cases of mental insanity, extreme "nervousness" and eccentricity, stuttering, convulsive and emotional hysteria, various neuralgiæ, extremes of mental character whether good or bad, and sometimes (but I think less frequently) epilepsy and paraplegia. These evidences of family relations may help in diagnosis, just as, in the diagnosis of a doubtful tuberculous disease, it is important if, among the members of the patient's family, there have been many more than an ordinary number of cases of pulmonary tuberculosis, of tuberculous lymph-glands, of lupus, or of perforating ulcers of the nasal septum or soft palate. So, in the diagnosis of a doubtful case of gouty disease, it is important if relatives have had either typical gout, or many of the less marked forms of gouty affections of the skin, or kidneys, or any other part. It is a general fact, that if any constitutional disease is prevalent among many members of the same family, it affects them variously, in different degrees of intensity, and in different parts and textures; but by this diversity the total value of the evidence of inheritance, as bearing on a doubtful case, is not diminished.

The family relationship between the nervous mimicries and mental insanity is specially worth considering. It helped us to the diagnosis, as some of you may remember, in the cases of two girls who were at the same time in Sitwell ward: one with strongly marked mimic disease of the hip; the other with very slightly marked real disease. The mother of the former was in a lunatic asylum; the mother of the latter died tuberculous.

I believe that a large majority of the worser cases of nervous mimicry occur in members of families in which mental insanity has been frequent. And the fact is important, not only for diagnosis, but for pathology. It may serve to strengthen the view that nervous mimicry is a mental disorder; but I believe it may be more rightly read as an indication that, whatever mental insanity may be as a disorder of some portion of the brain, the like is nervous mimicry as a disorder of other nervous centres. Surely, any nervous centre may "go mad" as well as any part of the brain, which is appropriate to any part of the mind; and may be mad in different ways, imitating the idiotic, the emotional, the maniacal, or other forms of insanity. But I only suggest this for your study, and by the way. Let us see for other grounds of diagnosis.

Nervous mimicry is much more frequent in females than in males; more frequent from the beginning of puberty to middle age than in either earlier or later life; more frequent in the more cultivated than in the rougher classes of society. But in what proportions it occurs in each of these several groups it seems impossible to tell with any fair approach to accuracy; for no one has a field of observation so general, or so equally inclusive of all these groups of persons, as to be able to count fairly among them. I should disbelieve any statistics pretending to settle the proportions accurately. You may be sure that neuromimesis is most frequent in young women of the more cultivated classes; but you may be equally sure that it is not so rare among men, or children, or at any age, or in any social condition, as to make it unreasonable to suspect it in any case of obscure disease. You had better not let any such case pass without asking yourself, Is this disease, or any part of it, mimicry? Some of the worst cases of mimicry of disease of the spine and pelvis that I have seen have been in men and women of mature age; some of the worst of joints in young children; some of the worst of all kinds in poor people.

It is equally or more difficult to find any general characters of health, except those of the nervous system, which may help to the diagnosis of mimicry from real disease. Some of the patients are in various degrees gouty; some are tuberculous; some scrofulous. The nervous constitution may be mingled in various proportions with any others, adding its own characters to theirs, making pain more intense, spasm more severe and frequent, or receiving from other constitutions characters of organic disease very difficult to eliminate.

These various combinations of constitutions must be well studied. The most troublesome is the combination of the nervous with the gouty constitution. For in one in whom gout is not complete there are never wanting strange sensations—of tinglings, burnings, pains, pressures. In the neuromimete these become intense; his nervous system defines them or gives them form; and the difficulty of diagnosis becomes extreme. And as the combination with gout is the most troublesome, so that with tuberculosis is the most dangerous. It is through this that many die whose maladies have been made light of, and called, with a sneer, hysterical, or only nervous, or the like. They die, and often die young, not through their nervous malady, or anything directly affected by it, but through tuberculosis or some allied disease which they have inherited, and which their invalid habits have made it impossible to avert. Of the nervous constitution itself very few if any die; some remain miserable invalids all through life, till some casual disease, aggravated by their general feebleness, removes them: but the majority get well; they live through the time of life in which the constitution is most marked, and then their nervous systems become more tranquil, balanced, and orderly.

I think there is no constitution in which nervous mimicry is so commonly found as in patients who are said, and perhaps truly, to have a very bad circulation. Chiefly, these are marked by being habitually cold-footed. In nearly all weathers and all times their feet feel no warmer than the air; indeed, they feel colder, and are often damp and, in those who are not anæmic, are purple about the sides of the toes and under the nails. Sometimes the hands are habitually in the same condition, and the skin on the back of the upper arm is usually dusky, pink and purple, coarse and papillary.

Doubtless this coldness tells of very slow movement of blood in the skin of the cold parts; and, in seeming agreement with this, the heart is commonly feeble, irritable, and swiftly acting, so that the pulse is very quick, while the breathing is comparatively slow. Often, the inconsistency of a quick pulse with only natural or slow breathing and a low temperature may nearly suffice to tell that some very painful disease of long standing is only "nervous."

But, besides, this habitual or very frequent coldness of the feet probably indicates a contraction of the small blood-vessels dependent on disorder of nervous supply. For the phenomena are very variable. Some patients have such feet as, they say, cannot be warmed: they are cold all night, cold while long wrapped in warm flannel; and even when warmer they may become cold under mental influence. But in some the feet, after being cold all day, flush in the evening; in others they become red and even painfully hot, puzzling the student of diagnosis.

Such variations in the state of bloodvessels in any part seem to tell of nervous disorder overrunning from the cerebro-spinal into the vaso-motor nervous system. They are weighty evidences in favour of nervous mimicry in any

doubtful cases; and they become more so when, however often and extremely widely the supply of blood may have varied, the nutrition of the part remains unaffected.

The temperature of a patient in whom you are doubting between real and mimic disease should always be observed. Speaking generally, it is not affected in any degree proportionate to the signs which may seem like those of acute disease. With a joint or a spine as painful as in the most acute inflammation, there is usually a constantly natural temperature; and so of other nervous disorders imitating inflammations in other parts. And this inconsistency may settle your doubts. But if the temperature be variable, or often high, you must be cautious. You may rely much on heats and chills, on shiverings and sweatings, as signs of true disease in parts, and as very probably signs of suppuration; yet they are not quite sure. Many sensitive persons shiver on very slight provocation; for instance, when they are in pain or anxious, or what they call bilious, or exhausted. In hysterical persons, a shivering may take the place of an ordinary hysteric fit. Weakly persons, by whatever weakened, sometimes perspire very freely at night; and mere nervous excitement may raise the temperature to at least 101°. I have seen a case in which, for nearly a month during convalescence after fever, the temperature rose two or three degrees every night; the patient had some signs of disease at the hip, but the end of the case showed that there was no real morbid process present. And it may often be observed that, though with little or no organic disease, a nervous patient's temperature may be normal, or not above 101°, yet with a moderate addition of acute disease the temperature may rise much higher than it would in anyone with a healthy nervous system. I perforated an abscess in a very hysterical young lady's tibia; a few days afterwards the escape of pus was casually hindered, and in that evening her temperature rose to 105°. In the next evening it was 104·1°. In the following morning it was 100·5°; in the evening 101·5°; and then it fell nearly to normal. And this had happened without any material pain or inflammation; and, even when the temperature was 105°, she was cheerful, and with a pulse about 100. Her respiration was natural.

These facts may be enough for caution against over-reliance on any one sign of disease in patients of nervous constitution, even though it be the measurable temperature. Prudently estimated, it is of the highest value, even in nervous patients; over-estimated, it is more fallacious in them than in any others.

In all nervous constitutions, especially in those with the habitual coldness of the hands and feet of which I was just speaking, it is common for many of the internal functions to be torpidly and scantily performed. The bowels are often inactive, sometimes marvellously slow, the gastric digestion is feeble, and menstruation is scanty and irregular, or altogether suspended; but in these things there is no rule: in some nervous mimics the functions of organic life are done well enough.

In the defective ovarian and uterine functions of certain patients some see the centre and chief substance of the whole disease: a very mischievous fallacy. Of course the sexual organs appear generally in fault to those who are rarely consulted for the diseases of any other part; but in general practice they are, in a large majority of cases, as healthy as any other parts are, or not more disturbed. The close and multiform relations of the sexual organs with the mind, and with all parts of the nervous system, are enough to make the disorders of these organs dominant in a disorderly nervous constitution; but their relation to "hysteria" or to "neuromimesis," though more intense, is only the same in kind as that of an injured joint or an irritable stomach. All, in their degrees, may be disturbers of a too perturbable nervous system; and equally on any one of them the turbulence of a nervous centre may be directed with undivided force.

In patients with very strongly marked nervous constitution, a mimicry of organic disease may ensue as if spontaneously—without provocation. And the chances of such an event are greatly increased in the weakness of convalescence after acute disease, a condition in which whatever is wrong in any constitution has the best opportunity of appearing in force. But much more generally the mimicry begins after some event which has the relation of an exciting cause, determining in many instances not only the occurrence of the mimicry but its locality.

These exciting causes may, then, be our next subject; and these also may be studied chiefly with a view to diagnosis.

Among the chief are sudden mental distresses, emotion, disappointment, or exhaustion by overwork. When any of these can fairly be traced as inducing a seeming organic disease, the probability of a neuromimesis is increased. Sometimes the effect of mental strain is very striking. I saw one day a young gentleman who had been overworking for a civil service examination. After a three hours' mathematical cram he fainted, and when he rallied had a very close mimicry of paraplegia, which lasted many weeks. On the same day I saw a gentleman who had been greatly overworked in a prosperous business. He kicked his great toe severely, and had a mimicry of tetanic convulsions in the limb, with night panics and other curious nervous symptoms, which after a few days were followed by the sensations of spinal disease such as one of his brothers died with. This patient was supposed to be strong, but was really very nervous, timid, and watchful. The other was generally calm, active, and vigorous; but one of his sisters had had severe hysteria and apepsia.

In cases such as these the mental disturbance appears as an exciting cause; in others of longer duration, as with constant anxious watching or any feelings long suppressed, if the mental states may not be regarded as exciting causes, they so greatly enhance the tendency to nervous mimicry that its outbreak may seem spontaneous.

In another form, a mental condition may be regarded as the determining or exciting cause—namely, when a patient imitates unwittingly and unconsciously another person's disease. In a case which I do not doubt was a neuromimesis of hip-joint disease, with limping, and with eversion and contraction and some pain of the thigh, I found that the patient's brother had advanced true hip-disease—a fact which rather added to the difficulty of diagnosis, for with the probability of similarity of constitution in two brothers it might be deemed very probable that both would have the same organic disease.

Similarly, through sympathy, even without family relationship, one person may acquire the sensations of disease described by another. In the fortnight following the death of the late Emperor Napoleon, I was consulted by four persons who described, as they felt, the sensations of stone in the bladder. One had some slight disease in the bladder; the others were healthy men, except in that they had nervous irritable bladders; but there was not any ground for a suspicion of stone in any of them, and none of them had suspected it, or felt the sensations that led them to the suspicion of it, till they were excited to attention and suggestion of these sensations by the constant thinking and hearing of what were supposed to be the sensations of the Emperor.

More frequent probably than any mental state, among the exciting causes of nervous mimicry, is injury of any kind, especially of bones and joints. In the majority of the cases of mimicry in these parts, and of the spine, injury is told of as the cause of disease. The history thus adds to the difficulty of diagnosis; for injury is as often the cause of real disease—and after injury, let me tell you, nervous mimicry is not only more difficult to be sure of, but harder to cure. For there is something tangible to appeal to, something which would indeed be quite inadequate to explain any severe symptoms in a person of sound nervous system, but which the mind and mimicry can invest with symptoms enough for even the gravest disease.

In many cases you will find it very hard to tell what has determined the locality of a mimic disease. If it be not injury, it may be some inherited local disposition to disease, or a special local excitability; but when we cannot even guess, there may yet be no ground for doubting that the malady is mimetic, for we are in only the same difficulty as we often are in trying to say why, e.g., gout is in some persons localised in the hand, in some in the foot, in some in the skin, or stomach, or bladder. In all alike the constitutional malady may be clear, however obscure may be the conditions determining its local evidence.

I say the constitutional malady; and let me again and again repeat, that in every case of this kind you are to look for the essence of the disease to the general condition of

the nervous system. There is no greater fallacy than to suppose that nervous mimicry, or hysteria, or any of the allied forms of disease, can be referred to any malady of any other part than the nervous system. There is not an injury or a disease of the ovaries, or prostate, or any other part, to which hysteria, hypochondriasis, or any allied malady has been referred, which may not be found, in some persons, free from all nervous complications whatever. It is only the hysterical by natural constitution who can be made to display hysteria by any local disease or injury—only those who are by constitution predisposed to nervous mimicry in whom such mimicry can appear.

ABSTRACT OF TWO

Lectures

ON THE

ANATOMY AND PHYSIOLOGY OF THE OVUM IN THE EARLY MONTHS OF PREGNANCY.

Delivered at St. George's Hospital,

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LECTURE I.

GENTLEMEN,—A favourable opportunity has presented itself for allowing us to investigate the different structures which surround the ovum during its development in the uterus. This subject is full of interest to the physiologist, and of great practical importance in its relation to the symptoms and treatment of some of the diseases of pregnancy, and a knowledge of the structures we are going to consider is necessarily required before we can study the pathological changes to which they are liable.

On the table before you is a preparation of a uterus containing an ovum at a very early stage of development. The gentleman who has done me the favour to offer it to our museum requested me two days ago to be present at the post-mortem examination of a young woman who had died rather suddenly with symptoms of epilepsy. In the course of the examination we observed that the uterus was increased in size, and that there was well-marked hyperæmia of the peritoneal covering of the uterus as well as of the broad ligaments and ovaries. The probability of pregnancy was so strongly indicated by these appearances that we determined to observe great care in the operation of removing the uterus, particularly as we were informed by her mother that the young woman had menstruated six weeks before death. Before dividing the vagina, we made sections through both the ovaries, and discovered in the right ovary, which was rather larger than the left one, the undoubted evidence of pregnancy, a true corpus luteum. If you examine it, you will perceive that its length and breadth are equal to half those of the ovary itself, and that there is a cavity in its centre which communicates by a minute perforation, situated on a slight prominence, with the external surface of the ovary—that is to say, with the peritoneal cavity,—and through this perforation we may conclude that the ovum escaped.

Let us defer for the present the investigation of the structure and origin of the corpus luteum, and turn our attention to the contents of the uterus. It is almost unnecessary for me to tell you that few of us are likely to have another opportunity of examining such a preparation as this before us; for as the measurements of the sac of the chorion and the embryo, which I have already ascertained, are not more than 1 in. in diameter, and ½ in. in length respectively, the statement made by the mother is most likely to be correct, and consequently the ovum cannot be more than six weeks old, if so much. The uterus measures 4·2 in. in length, and 3·4 in. across the fundus in its broadest part. The canal of the cervix uteri, which is included in the length I have stated, measures between ·5 in. and ·6 in., and is full of yellow, transparent, viscid mucus, which forms what is termed the "mucous plug" peculiar to the early months of pregnancy.

If we open the cavity of the uterus by an incision through its anterior surface, as I have already done, the ovum will be exposed to view, and on cutting through the decidua reflexa, which forms its external covering, the villi of the chorion are clearly seen. The chorion has also been divided in order to expose the embryo, which may be observed enclosed in the delicate membranous sac of the amnion.

You will have but little difficulty in understanding the functions performed by the structures which are concerned in fœtal development, if you keep in mind the fact that although there is no direct connexion between the blood of the fœtus and that of the uterus, yet the processes of respiration and absorption are carried on in the most perfect manner. The process of respiration is effected by the same means that are observed in the gill of a fish—that is, by the exposure of the venous blood of the fœtus to the influence of the maternal arterial fluid, and from the same source the elements of nutrition are absorbed by the vessels of the chorion.

You observe that the cavity of the uterus contains fluid blood, and that its internal surface is covered with a soft spongy membrane of considerable thickness, which is perforated with numerous small orifices. If you press this membrane at any point with the forceps, you perceive that blood oozes out of these orifices; and if you endeavour to trace the canals which pass from them into the deeper layer of the tissue of the membrane, which may be done where the uterus is divided, you will find that they are connected with delicate vessels, which form plexuses of considerable size, and which pass into the uterus. This particular part of the membrane covering the uterus is termed the uterine decidua, to distinguish it from that part of it which covers the ovum, called the decidua reflexa. There is no difference whatever between these in their microscopical structure; and, what is remarkable, there are perforations in the decidua reflexa similar to those in the uterine decidua, which allow the maternal blood to pass through, and come in contact with the villi of the chorion. I may remark that it is only at this very early period that these facts can be clearly ascertained, and we might enter into many points connected with the anatomy of the decidua which would be interesting enough to engage our attention if the general view which I have given you were insufficient for the comprehension of the physiological phenomena observable in the development of the embryo. The singular fact that the villi of the chorion are surrounded by maternal blood is certainly consistent with the laws of physiology, and, as I shall show you presently, is of very great importance during the first few weeks of the existence of the fœtus.

You may be surprised at finding that villi cover the whole surface of the chorion—that is to say, there is no evidence of deficiency or excess of villi at any particular spot. With the exception of three villi on the side of the chorion next to the uterus, and one single villus on the opposite side, you may perceive that all the rest of the villi are quite free, and float about in the cavity of the decidua reflexa. We are justified in concluding, as is well known to physiologists, that at an earlier period the villi of the chorion were all free, and that the process of their attachment to the decidua reflexa takes place gradually in the course of the development of the fœtus. This may be more clearly seen by comparing with our preparation another one of a uterus at the fifth month, which is here dissected. It is necessary that you should know there is another decidua, which is only another part of that which we have been considering. It is called the "placental decidua," and corresponds to the surface of the chorion which is next to the uterus. It is into the placental decidua that the three villi in our first preparation are attached; while in this one of the fifth month it corresponds to the placenta—indeed, it forms in chief part the placenta itself.

It is clear, then, that we must regard the gradual attachment of the chorion to the decidua, through the intervention of the villi, as one of the most remarkable of the series of changes which gradually result in the formation, on the one hand, of the placenta, and, on the other, of the thin, apparently simple membrane in which the fœtus is enclosed in the later months of pregnancy. Thus in one part of the chorion the villi increase, and in another they disappear; and these changes proceed concurrently and proportionately.

There is yet another point which must be noticed—namely, the alteration which takes place in the decidua reflexa and decidua uterina. The perforations we have observed gradually become impervious, and the membrane which covers the uterus, as well as that which covers the chorion, diminish in thickness and vascularity until no part of the decidua remains in possession of active physiological functions, except that part involved in the placenta. You perceive in this preparation of the fifth month that there is no difficulty in dissecting off the decidua uterina from the uterus, and that it is not more than from one-twentieth to one-tenth of an inch in thickness.

Let me draw your attention to the condition, in the first specimen, of the uterine decidua close to the internal margin of the cervix uteri. You will find in some physiological works that the uterine decidua is represented as passing a short distance into the canal of the cervix with a free margin, so that you might conclude there is no protection against the escape of the blood which fills the cavity of the uterus, or, as it is termed, the decidual cavity, except that which is offered by the mucous plug which fills the cervix uteri. Now, I should not like to assert that this is never the case, but in the preparation before you the decidua passes across the cervix uteri, and thus a closed cavity is formed above it. As a further proof that the mucous plug was not the direct obstacle to the escape of maternal blood from the decidual cavity, I may state that the plug was transparent and free from any tinge of blood at its upper end.

Before the embryo is exposed to view by division of the amnion, let me ask you to observe this small and delicate membranous sac which is floating inside the chorion, and is external to the amnion. It has a long peduncle, which you will find, on close examination, passes into the umbilical cord. The surface of this sac is traversed by minute blood-vessels, which proceed from two principal branches contained in the peduncle. There is a transparent yellow fluid in the sac, which consists of albumen, and is the analogue of the yelk which plays so important a part in the development of the fœtal bird. The name by which the sac is known is vesicula umbilicalis. The vessels which cover it are arteries and veins, and though its size is so small in the mammalia, yet the fact that at this early period it is larger than in the fœtus of the third month would lead to the inference that it is of greater importance at the earliest period of fœtal existence than at a later time. On comparing the appearance which the sac presented when I examined it yesterday with other specimens which have come under my notice, I should certainly be inclined to think that the albumen it contains is an important source of nourishment to the embryo; indeed, when we observe, as I shall show you presently, that there are as yet no vessels in the villi of the chorion, it appears difficult to understand the means by which the embryo is nourished if it is not by the albumen in the vitelline sac.

The embryo itself may, now that I have laid open the chorion, be clearly seen. I am sure that you will agree with me, that there is not an object in nature which excites in the mind stronger feelings of interest, astonishment, and curiosity than such a specimen as this. There are still many points relating to the chorion and decidua to be considered, and I shall simply leave the specimen for your inspection till we resume the investigation at our next lecture.

ON A CASE OF

ANEURISM OF THE DESCENDING AORTA TREATED BY GALVANO-PUNCTURE.

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W. W——, aged forty-one, was admitted into University College Hospital on August 16th, under the care of Dr. Ringer, on account of severe and persistent pain round the lower part of the chest, which had for many months resisted all means of treatment. He gave the following history:—Until twelve months before admission he had enjoyed good health. He came of a healthy family, had never had syphilis, had always lived in the country, and was in comfortable circumstances. Three years ago he strained his left side at his work as a wheelwright; but the pain soon passed off, and after a few days he had no further trouble from it. Twelve months ago he began to suffer from severe pain round the margins of the thorax, more in the left side than the right, more severe at a spot in the left vertical nipple-line at the costal margin. The pain gradually became continuous; it was aggravated by movement, and was liable to sudden exacerbations, often preceded by a shiver. During the few weeks previous to admission this pain had become almost intolerable, destroying his sleep and appetite, and rendering all movement impracticable. He described the severe pain as being of a boring character, "like a red-hot iron being pushed through him." He had also severe burning pains in the course of the ninth, tenth, and eleventh intercostal nerves. A week before he was admitted into the hospital he was seen and most carefully examined by a physician to a London hospital, and at that time no tumour and no other physical sign of aneurism was present.

On admission, the patient was fairly nourished, but somewhat worn by the constant pain. His most comfortable position was lying on his right side, slightly supported, but during the paroxysms he found some comfort by getting upon his hands and knees. As he lay upon his back the left half of the thorax, from the second rib to the costal margin, was seen to heave distinctly, the cardiac region was slightly bulged, and the apex-beat was clearly visible, extending from one inch to the left of the sternum as far as the vertical nipple-line in the fifth interspace. There was a very distinct movement in the tenth, eleventh, and twelfth ribs at their anterior extremities, and this movement was seen clearly to occur immediately after the impulse of the heart, and quite distinct from it. On following the course of these ribs towards the back, a soft pulsating tumour was found close to the spine. It corresponded with the posterior parts of the ninth, tenth, and eleventh ribs. It measured 3 in. transversely, and about 3½ in. vertically, and projected about three-quarters of an inch above the level of the chest walls. It reached to within an inch of the spine of the tenth dorsal vertebra. The tumour pulsated forcibly; the pulsation was very expansile and superficial, and succeeded immediately on the heart's impulse. The tumour could be slightly emptied by firm pressure. The eleventh rib passing into it seemed to be destroyed, as there was no movement in it on deep inspiration. The other ribs moved in inspiration. On auscultation, a loud thud-sound was heard with the systole of the heart, followed by the second sound distinctly heard. There was no bruit or thrill in the swelling. On examination of the heart, a rasping systolic murmur was heard at the ensiform cartilage, reaching as high as the third costal cartilage. It was louder in expiration than inspiration; it was not to be heard at the apex. At the apex and base the heart sounds were normal. The breath sounds were perfectly normal. There was slight hyper-resonance in front. Except in the immediate neighbourhood of the tumour, there was no abnormal dulness at the posterior part of the chest. The urine was acid, free from albumen or deposit. The tongue was clean, and he took his food tolerably well. Bowels habitually confined, as he feared defecation on account of the aggravation it caused in the pain.

From the above facts Dr. Ringer concluded that the patient was suffering from an aneurism of the descending aorta immediately above the diaphragm, which during the last few weeks had perforated the walls of the thorax, and was rapidly extending, unconfined by any true sac.

On Sept. 1st the tumour had considerably enlarged; the pulsation was very superficial; the pain was, if possible, worse, only being relieved by frequent hypodermic injections of morphia. Under these circumstances, as it was evident that, if left to itself, the disease must rapidly have proved fatal, Dr. Ringer considered it a case fitted for a trial of galvano-puncture, and kindly put it in my hands to perform the operation. This was done on September 2nd, Dr. Poore assisting me with the battery. The needles used were Weiss's modification of Mr. John Duncan's insulated needles, in which gum-elastic is used as the insulator instead of vulcanite. The battery was Foveaux's arrangement of Smee's as made by Weiss. The operation was performed as follows. About ten minutes before commencing the patient was given a hypodermic injection of two-thirds of a grain of morphia, to enable him to bear the discomfort of

lying so long in one position. At 3.10 the two insulated needles were inserted into the centre of the tumour, one above the other, perpendicularly to the surface and parallel to each other, to a depth of two inches and a half, until felt to be perfectly free in the sac. One was connected with the positive and the other with the negative pole of the battery, twenty cells being in action. After five minutes, as the patient complained of no pain, the number of cells was increased from twenty to twenty-nine. At 3.20 there was a slight blush round the needles, and at this time a drop of frothy blood forced its way up the negative needle between the conductor and the gum-elastic. At 3.30 the pulsation was distinctly less forcible and less expansile. At 3.36 the patient said that he felt a little smarting in the tumour like that caused by a mustard plaster, but it was not sufficient to annoy him. At 3.45 he said he felt very comfortable, and so he remained till 4.30, when the needles were removed; no bleeding followed their removal. At this time the tumour was undoubtedly much firmer than before the operation; its whole character was altered; it felt somewhat tense, and the pulsation was scarcely expansile. There was no resonance on percussion, so that the amount of gas in the tumour cannot have been great. On examining the needles after removal, the positive was found to be almost dissolved away as far as the gum-elastic. The negative needle was of course unchanged, except that the gum-elastic had been destroyed for nearly a tenth of an inch by the alkalies set free at that pole. After the operation the patient passed a comfortable night. He had entirely lost his former pain, but suffered a good deal from what he thought was wind.

The improvement in the tumour and in his general condition continued on the following day, and we were inclined to think most hopefully of the patient. At 4.20, however, in the afternoon he suddenly felt faint, a cold sweat came over him, and he complained of a pain in the left hypochondrium. This pain soon subsided, yet, as the result of the case showed, this was probably a rupture of the sac into the left pleura. On Sept. 4th he had lost his pain again, and seemed doing well. The intercostal spaces below the ninth, tenth, and eleventh left ribs seemed to have sunk in somewhat. The movement of the ribs was as clearly marked as before the operation. His temperature had risen to 99·4°. On Sept. 5th, although complaining of no actual pain, he had a general indescribable sense of uneasiness in the left hypochondrium. The patient remained in much the same state till the 6th, when he began to relapse. His old pain never returned, but the tumour began to grow again, pulsation became more distinct and expansile, and the pain in the left hypochondrium gradually increased in severity till it rivalled, or perhaps even exceeded, what he suffered before. The man's sufferings being aggravated by movement, and his most comfortable position being on his side, it was not easy always accurately to examine his chest. On the 9th, however, it was found that the apex was displaced to the right side, close to the sternum, and in the normal position of the apex was a pulsation, the exact nature of which it was difficult certainly to ascertain. The patient having decidedly derived some benefit from the first operation, it was determined, even in face of the evident hopelessness of the case, to operate again, in the hope of giving him some relief, and perhaps delaying the fatal termination. The tumour had by this time reached nearly double the size it had attained at the time of the first operation.

On Sept. 10th the operation was repeated in exactly the same way as before. The needles were inserted about one inch lower down and further from the spine than on the first occasion. Some slight difficulty was found in introducing the negative needle, which had got slightly rusted, and, as the skin was frozen by the ether spray, it required some force to push it through. This violence may have been the cause of a few drops of pus which formed round the puncture. The patient complained of no pain during the operation. On withdrawing the needles, although the same number of cells had been used for the same time, the positive needle was found to be slightly less extensively destroyed than at the first operation, which was due to the somewhat weakened action of the battery. After the operation the pulsation seemed slightly less expansile, and the tumour felt tenser and somewhat harder, but the effect was not so marked as at the first operation.

On Sept. 11th it was clear that the patient was not relieved in any way. The tumour seemed tense, there was slight œdema of the skin, and a faint blush of redness round it. His temperature rose to 101° F. in the evening. On the 13th the collodion was removed from the punctures, and a drop or two of pus escaped from that made by the negative needle. The temperature rose in the evening to 103° F. The internal pain was very severe, and there was some burning pain in the tumour itself; the pulsation was very distinct and expansile at the margins, and the increase of the tumour became alarmingly rapid. On the 15th the skin covering it was red and tender; there was œdema reaching down the back to the loin; the pulsation was very forcible, but only seemed distinctly expansile at the margins, the central parts feeling quite firm. On the 18th some obscure crepitation was felt in the tumour, and some red serous discharge still continued to ooze from the puncture made by the negative needle. The pain was very great, especially internally on the left side. The patient was rapidly emaciating. On the 20th a purple patch appeared at the centre of the swelling. On the 22nd this had increased to a gangrenous patch the size of the palm of the hand. Crepitation was now very distinct all over the tumour. The temperature had gradually fallen since the 13th, till it was now only 99° F. During the last few days the patient had suffered frequent attacks of severe internal pain on the left side. He had some stitch on that side in respiration. On the 24th he complained suddenly, while being moved, of severe pain beginning in the left shoulder and passing through to the lower margin of the thorax; he broke out into a cold sweat, his pulse failed, and his lips became pale; in a few minutes the pulse returned and could be felt for another five minutes, when it ceased again, and he died.

Post-mortem examination, three hours after death.—The tumour was found to measure 8 in. vertically and 6½ in. transversely; it projected about 2 in. above the level of the back. In its centre was a slough as big as the palm of the hand. On removing the skin a clot of blood was found reaching from the lower border of the trapezius almost to the crest of the ilium. This was bounded only by the muscles covering it. The latissimus dorsi was sloughy, and could scarcely be distinguished from the clot beneath it. The serratus posticus inferior was so blended with the clot as only to be recognised by its tendinous fibres. The whole of this mass of clot was hollowed out into cavities filled with gas, like a coarse sponge. The surface was of a dirty-maroon colour, and it had an offensive gangrenous odour. On scraping away the superficial parts of the clot, the opening into the primary sac of the aneurism was brought into view. The twelfth and eleventh ribs were bare in the whole of their length, and the tenth for a distance of 6 in., and the ninth about 4 in. The eleventh rib was completely destroyed for about 2 in., and the transverse process of the eleventh vertebra projected, rough and bare, into the clot. The divisions of the erector spinæ opposite this spot were partly destroyed. Between the ribs the finger could be passed deeply into a mass of clot inside the thorax. Two firm laminated masses of clot, each about 1½ in. in diameter, were found just inside the thorax, in the situation where the needles had been passed, but there was nothing certainly to show that they were due to the galvanic current. They were of a dark-purple colour, quite free from gas, and quite different in every way from the mass of soft decomposing clots covering them. On opening the thorax the heart was found to be greatly displaced to the right by a large extravasation of blood into the left pleura. This extravasation was bounded above by the lung, firmly bound down by adhesions. It reached upwards to the level of the ninth rib, and followed the course of that rib round the thorax; below it had pushed the diaphragm downwards to its greatest possible extent, forming a tense bag of blood, projecting downwards into the abdomen, crumpling up the spleen, so that its anterior and posterior margins were in contact, and displacing the left kidney two inches downwards towards the middle line. The whole collection amounted to about three pints. It was composed partly of fluid blood and partly of firm clots, evidently of some slight age, but not laminated or much decolorised, and a few softer clots with bubbles of gas in them. On cleaning out this blood the true sac of the aneurism was found, with a rupture in its lower part, which just admitted the tip of the finger.

The pleura at the part corresponding to the extravasated blood was lined with a thick layer of recent lymph. On removing the viscera the sac of the aneurism was found to have the following relations:—It consisted of two parts, one on each side of the aorta. On the right side was a long oval pouch 5½ in. in length by 2½ in. in breadth. It was almost filled with firm, laminated, decolorised clots. This sac reached from just below the eighth rib to the diaphragm. On the left side was a large, irregular, thin-walled sac reaching from between the ninth and tenth ribs above, downwards to the diaphragm, and outwards as far as the tip of the twelfth rib. It had ruptured, as before described, close to the diaphragm, and behind, the true sac had disappeared; the muscles of the back alone confining the blood. Between these two pouches the aorta ran, its anterior part seeming to be healthy. On slitting it up an oval opening was found opposite the bodies of the tenth and eleventh dorsal vertebræ, oval in shape, with smooth edges, and measuring 1¼ in. in length by 1¼ in. in breadth. The bodies of the ninth, tenth, eleventh, and twelfth dorsal vertebræ were found to be extensively eroded. The aorta presented some patches of atheroma, but in the greater part of its extent was tolerably healthy. All the viscera were healthy. No disease of the heart.

Viewing the whole case in the light of the post-mortem examination, its history seems to be as follows:—Shortly before admission the soft sac on the left side had yielded posteriorly, the blood being then only confined by the thin muscles of the back. The first operation caused the formation of a large clot in this pouch, which hitherto had acted as a sort of safety valve, and the result was rupture of the sac into the pleura on the following day, the aperture being rapidly plugged by a fragment of clot. The clot formed by the operation, being unsupported by any firm sac, soon yielded, and allowed the aneurism to grow uncontrolled. The second operation certainly did no good, though a considerable clot was, doubtless, formed, the tumour having grown to an uncontrollable size. It may perhaps have hastened the sloughing of the skin over the most prominent part, but probably not to any material extent. During the last few days of life it is most likely that frequent small hæmorrhages occurred into the pleura, pressing on the heart, and impeding its action, and death seemed to result from a final and more extensive hæmorrhage, accompanied by syncope.

The circumstances which seemed to justify operation in this case were the following:—1st. The fact that aneurisms in this situation are almost invariably sacculated, and communicate with the aorta by an opening of moderate size. 2nd. The good health of the patient. 3rd. The evidently hopeless nature of the case under any other mode of treatment, and the hope that by galvano-puncture we might at least relieve some of his pain and delay the fatal termination. The unfavourable circumstances were—1st, the rapid growth of the aneurism; 2nd, its protrusion through the chest-walls, forming a large secondary tumour, with a wide opening into the sac—conditions which, according to Ciniselli, render cure impossible, though relief and delay may be obtained.

Having decided to operate, I was guided in the method chiefly by the admirable papers on Electrolysis of Aneurisms by Mr. John Duncan of Edinburgh. Following his advice, both needles were inserted into the sac. Foveaux's arrangement of Smee's battery was used because it seems to fulfil better than any other the conditions pointed out by Ciniselli as desirable in the treatment of aneurism. His observations have shown that all elements of low electromotor power and small surface are to be preferred to the more powerful batteries, as the production of heat is avoided, and there is less tendency to consecutive inflammation of the sac. Since operating on this case I have seen and heard of others in which the positive needle only has been inserted, in order to avoid the supposed dangers resulting from the production of gas at the negative pole. This mode of proceeding seems to be wrong on the following grounds:—1st. The observations of Ciniselli, Mr. John Duncan, and others have clearly shown that the danger from the production of gas is more imaginary than real. 2nd. When only one needle is inserted the electrolytic action is so greatly diminished that the operation amounts to little more than simple puncture. This is shown by the very slight solution of the positive needle that occurs when this mode of operating is adopted compared with that which takes place when both needles are inserted. It may also be demonstrated by the following simple experiment, which I performed in conjunction with Dr. Poore, to whom I am also much indebted for help in the electrical part of the operation. The white of an egg being poured into the hollow of the palm, the point of the positive needle was inserted into it; the sponge of the negative rheophore was then placed at the back of the hand, and twenty cells of Weiss's battery turned on. A considerable shock, followed by severe burning pain at the back of the hand, was the result; but at the end of five minutes no appreciable clot was to be seen at the positive needle, although the steel was slightly blackened. Two needles were now inserted, one connected with each pole, and the same number of cells made use of. In two minutes there was a firm coagulum as big as an oat on the positive needle, and a frothy mass as big as a pea round the negative. The amount of electrolysis being proportional to the intensity of the current, it is evident, by Ohm's law, that the more we increase the external resistance the less action we shall get. The human body is a very bad conductor; and the above experiment shows that the insertion in the circuit of the thickness of the hand is enough almost to abolish electrolysis, unless a considerable number of cells be used and the action continued for a long time. It is obvious also that the greater the amount of tissue between the plate or sponge by which the negative pole is applied and the positive pole, the greater will be the diminution of the electrolytic action. By this method of operating, therefore, it is evidently necessary, in order to obtain any result, to apply the negative pole as close as possible to the tumour, and to use as many cells as the patient can bear; and it becomes a serious question whether this would not be likely to cause inflammation of the already stretched and irritated skin.

In conclusion it may be observed that, in inserting the needles, it is better not to use the ether spray; the pain is very slight, and the frozen skin offers a serious impediment to the entrance of the needle. And I believe this, and a slight rustiness of the negative needle, to have been the cause of the few drops of pus which formed round the puncture after the second operation, as the insulation of the needle was perfect, and its point at least two inches and a half from the skin.

I am indebted for the notes of the case to Mr. T. Barlow, physician's assistant.

"REST" IN THE TREATMENT OF CONSUMPTION OF THE LUNGS.

BY I. B. BERKART, M.D., M.R.C.P.L.,

ASSISTANT-PHYSICIAN TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK, AND PHYSICIAN TO THE TRAINING HOSPITAL, TOTTENHAM.

THE desponding view which was formerly taken of the treatment of phthisis has of late, thanks to an improved knowledge of the pathology of the disease, given way to better prospects of a more successful treatment of the disease. Indeed we may now with some satisfaction look back to the time when every case of consumption, even at an early stage, was despaired of beforehand; but even now we must confess that the therapeutic means at our disposal are far from having reached such perfection as would be desirable.

The failure in the treatment of phthisis is, I think, mainly due to the existing uncertainty of its pathological conditions. It is sufficient to call to mind the various doctrines held at the present day on the nature of phthisis, in order to feel convinced that principles of treatment based on such uncertain pathological data must lead to doubtful results. In fact, phthisis is as yet better known by its termination than by its mode of origin and progress, and as long as these remain unknown there can be little inducement to share in the sanguine hopes of curing the disease.

The object I have now in view is to call attention to the beneficial influence which diseased lungs must experience

from rest, a therapeutic agent the value of which has long since been recognised in all departments of medicine. I must therefore refrain from discussing the pathology of phthisis, and from pronouncing in favour of the one or the other of the current doctrines, in order not to give rise to an erroneous impression that rest is only applicable in the treatment of phthisis of a certain kind. At all events, if diseased lungs benefit by being excluded from the respiratory movements for some time, it is indifferent whether a catarrhal or a parenchymatous pneumonia has been the starting-point of the disease.

I shall, however, not transgress the limits of well-established anatomical facts if, as the basis for the consideration of treatment, I assume "a pneumonia," which may completely subside without leaving any traces of its former existence, but which in the majority of instances leads to destruction of the pulmonary tissue. I thus leave it undecided whether the cheesy masses and the tubercles are to be considered the causes or the results of the pneumonia. Frequently, however, after such a pneumonia, masses of cirrhotic tissue are found in the lungs, associated or not with cheesy transformation of some portions of the lungs, and this cirrhotic tissue appears to be the product of a natural tendency towards repair.

At present we have no means of preventing this pneumonia, although there is reasonable hope that the careful avoidance of all those circumstances which are now considered to be exciting causes of phthisis may be followed, in the course of time, by a numerical decrease of the disease. We are consequently brought face to face with the disease itself; and we must aim either at a complete subsidence of the pneumonia, or at least at the formation of a permanent connective tissue—the above-mentioned cirrhotic masses. And although this last termination of the pneumonia is by no means indifferent to the subsequent functional activity of the lungs, it is, under the circumstances, the most favourable *quoad vitam*.

In striving to attain this object we labour under the great disadvantage that the causal indication cannot be sufficiently met with, and that the treatment therefore chiefly consists in attention to symptoms. Their correct appreciation is often attended by the best results, but it is evident that a symptomatic treatment must be unsatisfactory as long as the causes remain active. Now phthisis is "the expression of a general predisposition localised in the lungs" (Buhl), and produced under the influence of some unknown atmospheric and telluric influences. Both these causes are chiefly known from their effect, and we possess only scanty means so to modify them as to suit the purpose of treatment. Yet the little we can do in this direction, together with treatment of symptoms, often succeeds in arresting the progress of phthisis and producing a state of comparative health.

But we have hitherto omitted from our consideration two factors, which, doubtless of some importance in the causation of phthisis, are not without exerting an injurious influence on the inflamed pulmonary tissue. I mean the movements of the lungs, and the consequent access of the atmospheric air, with its variation in temperature, pressure, degree of moisture, and admixture of foreign and irritating substances.

It is a peculiarity of the organ of respiration that from the first to the last moment of life it is apparently called upon to work continuously, without ever enjoying the salutary influence of rest. Possibly, in the healthy individual, parts of the lungs perform alternately the necessary function of respiration; but in those whose constitution predisposes them to the "localisation" in the lungs, the strain inherent in the functional activity itself will undoubtedly prove a source of irritation. If strain be admitted as an etiological factor, we can easily understand how much more potent must be its influence on the pulmonary tissue already inflamed. Indeed, if we can figure to ourselves the aspect of a recently inflamed apex, with its bright-red colour, its distended vessels, its stroma infiltrated by a gelatinous substance which chiefly consists of cells of varying shape, and its epithelial lining exfoliated, we can form an idea what disastrous consequences must arise from the continual straining of such part, and from the contact of its denuded surface with the fresh irritants contained in the air. A rational treatment of phthisis must therefore include attention also to these points, and it necessarily follows that the movements of the lungs are to be limited as much as possible, and to be excluded for some time from the respiratory function.

Rest is a therapeutic agent which has been long since utilised. Thus, in the treatment of a fractured bone, or an inflamed muscle or joint, rest of the injured part is the first and most essential condition, without which no recovery can ensue. And though in such a case the constitution, and all other conditions of the patient, were the most favourable for recovery, this will not take place unless the injured part is kept completely at rest. The same practice is adopted in ophthalmic surgery, and we know that an inflamed eye is carefully shielded against its physiological stimulus—light. In medicine also physicians enjoin silence in the case of a laryngeal affection; in fact, in every case of disease the patient, as well as the physician, desire above all rest of mind and body.

But it appears to me that the affections of the joints bear a close resemblance to those of the lungs. Movement is to either of them a kind of physiological stimulus; both take on diseased action under the influence of the same diathesis (scrofula); yet, in the case of fungous inflammation of the joints, by rest and hygienic measures the masses of granulations of the opposed surfaces of the joint meet and become converted into fibrous or osseous tissue, and the anchylosis which thus results is, under the circumstances, a very favourable issue of the affection of the joint. If, therefore, with regard to the affection of the lungs, we can obtain similar or analogous results, we may congratulate ourselves on being able to prolong a life which would otherwise be lost.

The distant analogy which I have traced between the affections of the joints and those of the lungs has been maintained also by Mr. Hilton, independently of whom I have formed the above opinion. Speaking of pleurisy, Mr. Hilton* says:—"If a joint be inflamed, we put a splint upon it to keep it at rest. Why not plaster or bandage a chest in cases of pleurisy, when the acute mischief has passed off? Surely it would have the tendency to subdue the inflammatory condition by preventing any friction between the two opposite pleuritic surfaces. If this principle be true in its application to these cases, *it will be true in all analogous directions.*

"All surgeons must have observed, in cases of pleurisy, that if the patients be asked to take a full breath, to raise the ribs and expand the lungs, they cannot do so without suffering pain. This is surely very suggestive of the importance of rest, and points to the value of plastering or strapping the chest in cases of acute or chronic pleurisy, with or without fracture of ribs.

"These observations, of course, suggest another practical lesson—never to allow a patient suffering from pleurisy or pneumonia to talk or to answer questions except by monosyllables, so as to avoid a full inspiration. Let the patient write all his or her wishes on a slate. This may appear a small item in practice; but I could mention several instances where this little element has been the turning point in the case. A physician, residing not far from me, had under his care a patient who had received a blow upon his chest by a fall upon the part; and as he was after several days still suffering a great deal of pain in breathing, the physician asked me to see him in reference to the possibility of fractured ribs. I could find no fracture; but I observed that the patient had a most worrying wife. She was incessantly talking to him day and night, and there were continual contentions between them upon domestic affairs. I suggested to the physician that the sole cause of the pain was in all probability produced by the patient constantly moving the injured or bruised soft parts by using his chest and lungs in speaking. All I recommended was, that he should hold his tongue and have his chest bandaged. I requested that his wife would not say a word to him, and would provide him with a slate and pencil, so that he might write down all his desires. From that time he got quickly well, *by local rest.*"

Daily observation furnishes direct proofs that rest exercises a most beneficial influence in the affections of the lungs. Thus in the case of fracture of the ribs and laceration of the lungs, accompanied by hæmoptysis, hæmothorax, &c., surgeons can state with great satisfaction that "it is surprising what an extent of injury may take place in

* On the Influence of Mechanical and Physiological Rest, &c., p. 250. London, 1863.

this way, and yet no serious consequences ensue";* and, indeed, such satisfaction must be the greater since they may ascribe to their treatment the favourable results obtained.

Another point which may be adduced in favour of rest is the fact that the vast majority of out-patients, before applying at the hospital, have worn plaster over the painful part of the chest. I have, as a rule, found the patients more or less eloquent on the relief which they thus obtained. I have taken some pains to examine the ingredients of these plasters, and have found them to be composed of inert substances. Now, that beneficial effect can only be attributed to the relative immobility and the consequent rest of the painful part, and indeed a piece of adhesive plaster invariably produces the same effect.

I am also inclined to think that the value of compressed air in the treatment of phthisis principally consists in the rest which the lungs derive from it. If we bear in mind that the pressure employed must not exceed one atmosphere and a half, we may safely assert that the very good results of that treatment cannot be due exclusively to the chemical action of the greater quantity of oxygen inspired. What is constantly noticed is "a diminution in the frequency of respiration." This is not only observed whilst the compressed air is inhaled, but it also remains to a less degree after the return into the common atmosphere. The frequency of respiration may be reduced to 3 or 4 in a minute, and may permanently remain so for some time. The diminution of the frequency of respiration is also accompanied by an increase of the vital capacity of the lungs.† Now, although the rest to the lungs produced by means of bandages and strapping cannot aspire to the same results as the compressed air-bath, it can, nevertheless, confine the work to be performed to the comparatively healthy parts, and exclude from it the inflamed portions, which are, after all, useless for the respiratory function.

It only remains for me to state that any fear that a consolidated portion of the lung may, by being kept immovable, disintegrate more rapidly, is completely unfounded, and disproved by clinical observations as well as by experiments on animals. We all know instances of great compression of the lung-substance by profuse pleuritic exudation, and the subsequent expansion of the lung when the fluid is reabsorbed. On the other hand, I think, if we can produce a fibrous thickening around cheesy masses, and their cretification, such a treatment has the same if not a better claim than that of aiming at the "softening of the cheesy masses and their speedy elimination from the body."‡ For the gap formed by the necrotic tissue can only be filled up by connective tissue if it be very small; and if the cheesy masses are eliminated by expectoration, there always remains a secreting surface exposed to the irritating influence of the atmospheric air.

I have, as already stated, only intended to call attention to a therapeutic agent from which great assistance may be derived in the treatment of consumption of the lungs. I abstain from relating the histories of cases which I have observed, in order to avoid a conclusion on its value. If what I have stated above appears to be in favour of rest, this can easily be tried, and a long and extensive application will secure for it a fitting place.

It must be left to the ingenuity of the practitioner to produce the immobility of the lungs by strapping and bandages. I have only made use of strips of adhesive plaster, and they have invariably answered my purpose.

I may also state that I have never seen any inconvenience to arise from it. On the contrary, patients who complain of pain in the chest immediately feel relief after being bandaged, and they declare that they can now breathe more easily. The frequency of respiration diminishes, so do the intensity of the cough and the quantity of the expectoration. With regard to physical signs, I am confident that these also give evidence of improvement.

It will be hardly necessary for me to insist that I do not consider rest as a "specific" in the treatment of phthisis, but only as a valuable adjuvant; and if we do not expect from it more than it can reasonably do, we shall, I think, not be disappointed in employing it.

Harley-street.

* Erichsen: Science and Art of Surgery, vol. i., p. 267.
† Waldenburg: Die lokale Behandlung der Krankheiten der Athmungsorgane, page 756. Berlin, 1872.
‡ Waldenburg: Die Tuberculose &c., p. 636. Berlin, 1869.

CASE OF AMUSSAT'S OPERATION.

By EDWARD SAINTHILL PEARSE, M.R.C.S.

EARLY on June 12th I was called to see Mrs. C——, aged forty, the mother of seven children, the youngest six months old. She was suffering from constipation; there had been no motion since early on the morning of the 9th. On that day, as I afterwards learned, she had applied to a surgeon, who had given her some purgative medicine, but saw nothing of her afterwards. I ordered a purgative mixture to be given every three hours.

June 13th.—Bowels not opened; constant vomiting. Ordered hot fomentations (this was not half carried out); enema; effervescing mixture with ten-minim doses of tincture of belladonna, and as much ice as she liked.

14th.—Repeated enema and mixture; vomiting very much better.

15th.—No vomiting. Continued enema, and gave aperient mixture. Passed long tube of stomach-pump, but could find no fæcal deposit in the rectum.

16th.—Continued in the same state. In the evening I took a friend to see her, and again passed the long tube without any result.

17th.—In same state. Called in Mr. Gamgee, of the Queen's Hospital, Birmingham, in consultation, who advised a pill with aloes and an enema to be given every three hours.

18th.—In same state. Continued pills and enema.

19th.—There was great tympanites, to relieve which I passed a fine trocar and canula into the left lumbar region, and drew off with an aspirator a large quantity of air. I also passed it in just over the transverse colon. This gave great relief for a time. On withdrawing the canula I found some fæcal matter in the tube, showing the colon had been punctured. She this day refused to take any more medicine or have the enema used. I then proposed an operation, but this she would not hear of. Up to this time the pulse had never been over 100. At 2 P.M. the pulse was over 140, and the countenance very anxious, but the temperature very little above normal. I consider the rapid pulse &c. to have been caused by excitement from the number of people who had been to see her, as the pulse had again gone down to 100 and she was quite free from pain when I went at 10 P.M.

20th.—Still very comfortable. Had slept a little during the night. Pulse 100 and strong. I then pressed the operation, which she consented to at 3.30 P.M. Kindly assisted by Messrs. Chapman, Ellis, and a Queen's Hospital student, I operated at 7 P.M. on the left side. Making an incision six inches long in a line between the last rib and the crest of the ilium the bowel came well into view. On opening it about three quarts of fæcal matter came away before I was able to fix the sutures. It was curious to note how every time I touched the bowel peristaltic action was instantly set up. I fixed the bowel to the skin by six deep sutures. The middle ones above and below were ordinary salmon-gut, softened in hot water. These I took away on the fourteenth day.

She has been going on towards recovery without a single drawback, the wound gradually healing, and the stools coming freely through the opening. On the second day after the operation I ordered liberal living, and she has been up for a little time each day for the past week; but to this date—July 8th, twenty-six days since the last natural motion—she has not passed anything that could be called a stool by the natural passage. I will give no opinion as to the cause of stricture, nor is there any previous history that would point to cancer as the cause.

Round Oak, Staffordshire.

HEALTH OF DUBLIN.—In the third quarter of the year there were registered in Dublin 2181 births and 1639 deaths. The principal causes of death were as follows:—Phthisis 242, bronchitis 139, convulsions 123, heart disease 94, diarrhœa 83, whooping-cough 66, fever 58, cancer 38, pneumonia 37, paralysis 46, liver disease 36, scarlatina 27, croup 21, measles 16, and diphtheria 14. The mean temperature was 58·2°, and the rainfall measured 10·598 inches.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF LUPUS TREATED WITHOUT CAUSTIC.

(Under the care of Dr. TILBURY FOX.)

THE following case (for the notes of which we are indebted to Mr. W. Murrell, clinical clerk) serves to illustrate two important points upon which great stress is laid by Dr. Tilbury Fox in the treatment of lupus. It shows, firstly, the good results which follow attempts to subdue the disease by checking the hyperæmia only; and, secondly, the necessity of recognising the modifications of the disease produced by a pyogenic habit of body, and the advisability of administering special remedies to counteract free pus-production in conjunction with the use of local measures adopted either for the destruction of the lupus neoplasm or for lessening any undue vascularity which may exist in the diseased part.

E. A. K——, a girl aged seventeen, was admitted on the 17th June, 1873. She has never followed any particular occupation. The family history disclosed only a slight consumptive tendency, but the patient was never very strong. When about nine years old she had measles, followed by "bad eyes." She has several times had abscesses form about the neck. About five years ago she noticed a "little white spot" close to and on the outer side of the lower angle of the right ala of the nose, which soon broke, and remained for about a year of the size of a pea. It then spread slowly during the following year, and for the last two years has increased rapidly in size. The patient has been under different medical treatment, and various lotions, powders, and ointments have been applied to the face, all of which, the patient says, caused the disease to spread rapidly.

On admission the patient was somewhat anæmic, and suffered occasionally from indigestion, but with this exception felt very well. The face presented an unsightly appearance from an oval patch of lupus, which involved the whole of the upper lip and extended upwards on each side of the nose to within half an inch of the lower margin of the orbit. On a level with the lower angle of the ala of the nose, it extended outwards on the right side for about two inches, and on the left for nearly the same distance. On the prominence of the nose it reached the lower border of the nasal bones. Both alæ were implicated, and were about a quarter of an inch shorter than normal, the lower border being extremely irregular and broken. The septum nasi was unaffected. The patch was of a dull-red colour, but in some places was covered with large yellow scabs, which readily peeled off, exposing a hard, irregular, hyperæmic, and bleeding surface. The edges were slightly elevated above the surrounding tissues. There was no discharge, and no pain except when the scabs were torn off. On the right side of the lower lip, about half an inch below and to the inner side of the angle of the mouth, was a patch of irregular shape, about the size of the thumb-nail, resembling in other respects that just described. About two inches behind the right ear was another patch similar in size and appearance to that just described. The neck on both sides was extensively marked with the scars of old abscesses, and on the left side, a little behind the bifurcation of the common carotid, was an abscess, evidently chronic, about the size of a threepenny piece. It was tender, and at times discharged freely.

The view taken of the case, as might be supposed, was that it was a lupus modified by the strumous diathesis, so that free pus-formation was present. It was felt that if any irritant were applied the disease would spread, and soothing applications were accordingly used to check the hyperæmia, whilst anti-strumous remedies were given to meet the pyogenic tendency. The scabs were removed by poulticing, and the surface was painted freely twice a day with diluted solution of subacetate of lead, and liniment of lime was used to exclude the air. The patient took cod-liver oil, quinine and steel, and was ordered a nutritious diet. This treatment was continued for six weeks from the date of admission, after which the patient was sent to Eastbourne, with instructions to continue the treatment for a month longer, with the addition every night of a plaster made of equal parts of lead and mercury plaster, which was to be placed over the solution of lime, and removed on the following morning.

The crusts had at this time ceased to form, the vascularity had diminished, and the patch had become not only paler but much thinner.

At the expiration of a month the patient again presented herself at the hospital greatly improved in personal appearance, and, although she stated that Eastbourne had not suited her, the condition of her face had steadily undergone improvement. On examination it was found that the diseased patch had almost disappeared. The surface was slightly reddened, but with this exception there was nothing to indicate the presence of disease except slight superficial scarring. There was no contraction, no loss of subcutaneous tissue, and there were no longer any scabs. The tissues about the nose and mouth were perfectly soft and pliable, and there was no elevation above the surrounding skin. The patch of lupus on the lower lip, which, on admission, had been of the size of the thumb-nail, was now represented by a slight redness not larger than a split-pea; so slight was the redness that till patient pointed out its existence it was quite overlooked. The patch upon the neck had undergone a similar improvement, and the abscesses were completely healed. The change in her personal appearance was indeed so marked that when patient wore a thin veil, or stood at the distance of a few feet, nothing unusual could be observed in the condition of her face, with the exception of the absence of a small part of the tip of the nose.

Remarks.—This case, which, in the ordinary course of things, would have been treated with caustics, shows what can be done by simpler methods, directed specially against the hyperæmia, and not against the neoplasm. Dr. Fox holds that whenever a patch of lupus is very hyperæmic and tender, and the patient is out of health, although the application of caustics may cure the disease in one spot, it will only effect this by producing deep cicatrisation, and the disease will almost inevitably spread, as happened in this very case at the outset. This case, which had existed for five years, made the best possible progress under the treatment adopted, with marvellously little disfigurement. The mode in which such a local remedy as the solution of the subacetate of lead acts upon the lupus may be open to question, but most probably it is by directly constringing the vessels and checking the vascular supply. As a consequence of this the new growth is literally more or less starved, and as it naturally tends to undergo retrogressive changes, it gradually disappears, as it would seem that under the use of the astringent the degree of its decay is greater than that of its growth. It should be noticed that this happy result is not to be looked for in cases of severe or extensive disease, in which the growth extends deeply into the subjacent tissues.

ST. THOMAS'S HOSPITAL.

ABSCESS CONNECTED WITH INTESTINE; PYÆMIA; OPERATION; DEATH.

(Under the care of Dr. MURCHISON.)

THE following case, for the notes of which we are indebted to Mr. W. S. Greenfield, M.B., B.S., presents several points of interest, although the absence of a post-mortem examination, which could not be obtained, renders it difficult to form any positive opinion of the nature of the case.

Robert K——, aged twenty-six, a mason, was admitted on July 5th, 1873. His wife stated that he had been in good health, though never strong, until three weeks before admission, when he was seized whilst at work with severe pain in the abdomen, chiefly on the left side, which compelled him to leave work and come home. The pain was of

agonising character, not distinctly located. About two hours after he reached home vomiting commenced, and was repeated every time he took food for three or four days. The bowels, which had previously been regular, were confined till four days later, when opened by medicine. The pain continued severe for two or three days, and slightly since. He has ever since been very weak and prostrate, and has suffered from shivering, followed by heat and sweating, occurring four or five times a day for the last fortnight. Three or four days before admission he first observed a small swelling in the upper part of abdomen, which was rather tender and painful; this has since increased and become more tender. No vomiting or retching for the last few days, and bowels have been open, stools light-coloured. No discharge of pus from bowels.

Present state.—10 P.M.: Extremely prostrate; anxious expression; drowsy and disinclined to talk; complete anorexia; tongue dry, brown, furred, and fissured; sickly, sweetish odour of breath; frequent hiccough, which is said to have commenced since admission. Temperature 101°; pulse 108, full and soft; respiration 32. He complains of pain and tenderness in abdomen, which is somewhat distended. On examination, a circumscribed swelling, the size of a half-walnut, was found nearly in the middle line, but a little to the right, about half-way between the umbilicus and the lower end of the sternum. It was soft, semi-elastic, non-fluctuating; very slightly diminished by firm pressure, but not reducible even after continued pressure. No impulse could be detected in it on coughing. The swelling was acutely tender, and its manipulation gave him great pain; but there was no general abdominal tenderness. No retching or vomiting occurred after the examination. The hepatic dulness was increased, and extended downwards just to the upper margin of the tumour, over which there was imperfect resonance; some bronchitic râles audible in lungs; a harsh systolic bruit over the base of the heart, probably pericardial.

As it seemed possible that the symptoms might be due to strangulation of a small ventral hernia, after consultation with Mr. Wagstaffe, Mr. MacCormac was sent for, who arrived at 2.30 A.M., and decided on exploratory operation. On puncturing the swelling with an aspirating trocar, a small quantity of offensive, dirty-yellow pus, of fæcal odour, was removed. An incision, three-quarters of an inch long in the median line, opened the cavity of the abscess, and about an ounce and a half of thick pus was removed. The cavity of the abscess had ragged walls, but was surrounded by a layer of firm substance, and closely attached to the abdominal walls. It could not be followed further. The pus contained much granular *débris*, many bacteria, mostly ovoid, some fat-globules, but no fæcal matter nor visible *débris* of tissue. Its odour was extremely offensive. For a short time after the operation he seemed relieved, but at 4 A.M. a severe rigor occurred, and the temperature was found to be 104·2° F., rising to 106° at 4.25, when the shivering ceased. By 7 A.M. it had fallen to 100·8°. Till mid-day he continued much the same, prostrate, with occasional hiccough; no tenderness over abdomen or wound. Another rigor occurred at 2.15, in which the temperature reached 105°, and again at 11 P.M. reaching 105·7°. Fifteen grains of quinine given every four hours appeared to have no effect in checking them.

July 7th.—Much discharge from wound, and very offensive; extreme prostration; hiccough continues. Takes nourishment pretty well. Temperature varying between 102·6° and 104°. No distinct rigors.

8th.—Appears almost moribund. The discharge from the wound has become of bright-yellow colour, and much less offensive, and evidently contains matter from the small intestine. Bowels open; motion of light-yellow colour. No abdominal tenderness. Temperature 101° to 102°.

9th.—Temperature 102°; pulse 150; respiration 62. No shivering. The discharge continues bright-yellow, and appears to be almost identical with the milk-and-egg mixture given as food. About an ounce and a half escaped to-day. Is unconscious.

10th.—Died at 8.30 P.M.

Remarks.—It seems probable that the abscess was formed in close connexion with the intestine, possibly as the result of some partial obstruction or strangulation, which may have been followed by incomplete perforation, localised peritonitis, and an abscess with a narrow or oblique opening into the bowel. It is difficult to account otherwise for the rapid occurrence of pyæmic symptoms. The operation did not appear in any way to accelerate death, but rather gave a temporary relief from pain; and had it been done before the setting in of pyæmia, it would possibly have resulted in cure, with a fistula opening into the small intestine.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

OVARIOTOMY; DRAINAGE-TUBE PASSED FROM THE PERITONEAL CAVITY THROUGH THE VAGINA.

(Under the care of Professor HUMPHRY.)

FOR the notes of the following case we are indebted to Mr. Robert W. Edginston, house-surgeon.

E. S——, a widow, aged fifty-two, admitted Feb. 6th, 1873, had had three children, and been the subject of ovarian dropsy for fourteen years, during which period she had been tapped twenty-one times. The last tapping was six weeks previous to her admission. The quantity of fluid removed on these occasions varied from nine to nine and a half gallons. It was thin, albuminous, not ropy nor of high specific gravity. Each tapping was quickly recovered from, and was productive of great relief and of entire subsidence of the swelling, so that there was every reason to infer that it was a single and simple ovarian cyst. Her health did not suffer much, and the proposal to remove the cyst by operation, which had been rather urged in the earlier period of the malady, had not for some years been made; still the intervals between the tappings had decreased from seven months to two months, and since the last tapping her health had rather failed. She felt weaker and had less appetite, and the swelling had returned more quickly than on former occasions, and was more burthensome. She therefore requested that the attempt should now be made to remove the cyst.

The abdomen was very prominent. It measured five feet in circumference a little above the navel, and three feet from the ensiform cartilage to the pubes. The legs and lower part of the abdomen were very œdematous; urine scanty; some diarrhœa and tendency to sickness. Pulse 100. The os uteri natural; the condition of the uterus itself could not be further ascertained.

Feb. 7th.—As her condition did not admit of delay, the operation of ovariotomy was commenced, under chloroform, by an incision four inches long, which was made as near to the pubes as possible, for the purpose of avoiding the region of the trocar punctures, where adhesions were most to be expected. The linea alba was carefully divided, but a gush of fluid showed that the sac had been opened. The fluid was allowed to flow away, and the sac was accordingly emptied. It proved to be adherent to the whole of the fore part of the abdominal wall, and some difficulty was found in tearing through the adhesions. This was, however, ultimately done, and the sac was removed without enlarging the incision first made, and with very little exposure of the contents of the abdomen. The pedicle was long. A clamp was applied. Two vessels in the pelvis bled briskly. These and four others on the inner surface of the abdominal wall were tied with catgut ligatures, which were cut off close to the knots. There was still oozing from many points into the abdominal cavity; accordingly, the precautionary plan suggested by Dr. Marion Sims was adopted. A trocar with canula was passed from the recto-uterine pouch of the peritoneal cavity into the vagina; a long perforated drainage-tube was then introduced through the canula, and the latter having been withdrawn, the tube was left, one end being brought externally through the vagina, and the other through the lower part of the wound. The two ends were secured by being tied together. The wound was closed with catgut sutures, and pads and bandage were placed on the abdomen.

After the operation there was no great amount of shock, neither did the temperature at any time exceed 101°. The looseness of the bowels, which existed before the operation, continued for some days. During the first three days a large quantity of sero-sanguinolent fluid passed through the drainage-tube. This stopped completely, and the tube was removed on Feb. 23rd. The clamp separated on Feb. 25th. The external wound healed without trouble,

and the patient recovered without any unfavourable symptom.

In another case since operated on by Professor Humphry in private, the same plan was adopted, and with the like good result. The patient was a healthy woman, aged sixty-two, living at Brandon, under the care of Mr. Thompson of that place, with enormous distension of the abdomen and œdema of the lower limbs and lower part of the abdomen. She had not been tapped. She was a person of good spirit, who calmly determined to undergo the operation for removal of the cyst, as the weight and distress were no longer endurable. The sac was extensively adherent to the front of the abdominal wall and in the pelvis, so that, as in the preceding case, it was opened in making an incision through the linea alba, and the contents of the sac at once poured out. The fluid was viscid, but not dark-coloured. The adhesions were so close and tough that it was difficult to distinguish the wall of the sac from that of the abdomen, and to effect the separation. The latter was, however, at length done with the fingers. There were no adhesions to the omentum or to the abdominal or pelvic viscera. The pedicle was sufficiently long to admit the easy application of a clamp. A few vessels were tied with catgut ligatures. Still there was some oozing into the abdominal cavity. Accordingly a drainage-tube was inserted by means of a large trocar passed from the abdomen through the recto-uterine pouch into the vagina. One end was brought out through the wound, the other through the vagina, and the two were tied together. The wound was closed with catgut sutures, and a pad and bandage was placed on the abdomen. Bloody fluid escaped through the tube during the first two or three days, and after six days the tube was removed. Not a single bad symptom of any kind occurred, with the exception of some pain in the body, which was at once relieved by a small dose of nepenthe, administered by Mr. Thompson, under whose care she remained. The clamp came away, and she quickly and completely recovered.

WHITWORTH HOSPITAL, DUBLIN.

CASE OF PURPURA.

(Under the care of Dr. M'DOWELL.)

FOR the following notes we are indebted to Mr. Cedric Hurford.

Catherine H——, aged twenty, a milliner, of sedentary habits, very delicate, thin, and anæmic, was admitted on the 23rd of June, her face covered with purpuric blotches, and with a dark halo around the eyelids. On examination, she was found covered all over the body with petechiæ of various sizes; her face swollen and puffy; enlarged glands under the maxilla; tongue swollen, with a dark spongy "elevation" on its left border; and on the inner side of the right cheek was another of these spongy "elevations," and, corresponding to this on the outer side of the cheek, a circular ecchymosis, about an inch and a half in diameter. Both these "elevations" bled profusely. The gums were extremely vascular, with a constant oozing of blood. The pulse was weak and rapid. There was no fever, and the patient did not complain of any pain. She stated that on the 21st, two days previous to her admittance, she went to bed, feeling pretty well, and that on the following morning she found herself covered with petechiæ.

June 24th.—During the night the patient had a severe attack of epistaxis. She is extremely weak. Ordered an effervescing mixture of bicarbonate of potash and citric acid, with four ounces of wine, and ten drops of the oil of turpentine every three hours.

25th.—Patient still very low. During the night had a series of "fainting fits." Increased the stimulants, giving her four ounces of whisky. She passed a quantity of blood in the urine, and complains of a severe pain in the back. More petechiæ have made their appearance, those on the legs being very numerous. Is to continue the mixture and turpentine, the quantity of stimulants being increased. There is a nasty fetor from the mouth. The spongy "elevations" above referred to appear sloughy.—Evening: Patient much worse; more blood passed in the urine. Increased the stimulants, with strong beef-tea &c.—12 P.M.: A slight improvement.

26th.—Still very low, but there is a slight improvement; hæmaturia continues; sloughs have formed on the tongue and cheek. To continue the mixture, wine, and turpentine; the last to be taken every sixth hour. Ordered a wash (one ounce of the tincture of the perchloride of iron to eight ounces of water) for the mouth, beef-tea, ice, &c.

27th.—Great improvement; less blood from the mouth; hæmaturia slight; pulse stronger; patient feels better; sloughs loosening. Continue wine, mixture, and turpentine. A wash of permanganate of potash for the mouth.

28th.—No blood in the urine. Oozing from the mouth and gums stopped. Bowels have been rather confined. Ordered an enema.

July 3rd.—The patient has made wonderful progress; has continued the mixture, wine, and turpentine. The petechiæ are gradually disappearing. Tongue and mouth are clean.

10th.—Patient left the hospital to-day. She has been taking the citrate of iron and quinine for the last few days, and is to continue it. There is an extraordinary *bruit de diable* over the jugular veins. A sojourn in the country recommended.

The above case is remarkable from the suddenness of the attack, the rapidity with which the alarming symptoms of hæmorrhage set in, and, finally, the steady and rapid progress she made towards recovery.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCT. 1ST, 1873.

DR. E. J. TILT, PRESIDENT, IN THE CHAIR.

DR. JOHN GOLDSMITH, Worthing, was elected a Fellow of the Society.

Mr. T. EYTON JONES read a paper

ON A CASE OF VESICO-VAGINAL AND RECTO-VAGINAL FISTULA.

The patient was seized with labour pains on Saturday night, and remained in labour until 5 P.M. on Tuesday afternoon, when a medical gentleman was called in, who delivered her by forceps. Ten weeks after her confinement she came under Mr. Jones's care, who discovered great swelling and redness of the labia. At the vaginal entrance were two apertures: the anterior small, barely admitting the little finger, apparently entering the bladder; the posterior covered by a red, velvety-looking, mucous swelling, through which the forefinger entered with ease, and apparently consisting of the vagina and rectum dilated into one cavity, and containing in it the closed mouth of the uterus. She could neither retain her fæces nor urine, and the catamenia have never since reappeared. Two and a half years after this disastrous confinement she suffered excruciating pain for a fortnight, at the end of which she parted with a phosphatic calculus, one inch in circumference and two inches in length, which had formed in the bladder or urinary passage. Venesection had to be performed every two months to relieve the severe headache caused by catamenial suppression.

Dr. HEYWOOD SMITH thought that the paper, to be of any use to the Society, should state accurately the exact present state of the parts. It did not appear from the case as then read that it was hopeless as regards any operative interference, and it seemed to him that an attempt should be made to remedy a state of things so deplorable.

Dr. AVELING considered that at all events some effort should be made to restore the patency of the cervical canal of the uterus.

Dr. J. BRAXTON HICKS read a

NOTE ON THE MUSCULAR SUBSURRUS IN RELATION TO THE FŒTAL HEART-SOUNDS.

The author wished to call the attention of the Society to a point with regard to the diagnosis of pregnancy and the life of the fœtus, by means of the existence of the fœtal heart-sounds, which he had not unfrequently observed in the course of his practice, but which he did not remember to

have seen in print, and summed up his observations as follows:—1st. That the number of vibrations of the abdominal muscles in a state of half suspension can be distinctly counted, watch in hand. 2nd. That their number and sound are so like those of a very rapid fœtal heart that they may be mistaken for them.

Dr. J. MATTHEWS DUNCAN read a paper

ON THE SPONTANEOUS SEPARATION OF THE PLACENTA WHEN IT IS PRÆVIA.

The author did not in this paper enter on the subject of hæmorrhage, desiring to keep in view only the mechanism of separation of the placenta when prævia. He pointed out that during labour every portion of surface of the body of the uterus underwent contraction, and that it was probably to the same extent over the whole of it. But the lower part of the body of the uterus was greatly expanded during labour, and contraction could there be only in the meridianal or longitudinal direction. The contraction of the uterus in early labour did not separate the placenta, wherever it might be inserted, whether prævia or not. A small amount of the whole expansion of the cervix, or an early stage of it, when there could be very little contraction, was sufficient to detach partially the placenta. He arrived at the conclusion that the placenta when prævia was separated by expansion, not by shrinking or contraction of the uterus. At present it was universally held to be separated by uterine contraction. The paramount errors of authors, such as Simpson and Barnes, were in supposing that the placenta might be attached to the cervix even near the external os, which it never was, and in not rightly apprehending the behaviour of the cervix during labour. The process of detachment by expansion will go on till the internal os is dilated to a diameter of about four inches, and this may occupy a great part of the whole duration of the labour. Study of the shape of the lower uterine hemispheroid showed that a meridian leaves the vertex or centre of the internal os uteri in a direction nearly at right angles to the uterine axis; and that, after it has described an arc of one and a half or two inches, it becomes nearly parallel to it. At about two inches and a half from the vertex the diameter of the uterine cavity is four inches. There is no need for any considerable expansion beyond a diameter of four inches, which is reached at a meridianal distance of two and a half inches from the centre of the internal os uteri. Expansion beyond this would produce very slight extension of uterine surface, and consequently slight detaching power, which would probably be counterbalanced by placental expansibility. Dr. Matthews Duncan pointed out that this was the measure of the spontaneously detaching area, and criticised the various other measurements that authors had made. He showed that Barnes's estimate of three to four inches from the os uteri must be far too great. The circle of latitude, two inches and a half from the vertex, marking this limit was the line insertion of the placenta within which constituted placenta prævia. Complete detachment of the placenta was to be explained by a study of the production of a caul, and of those cases in which the placenta was perforated by the advancing fœtus. Finally, Dr. Duncan called attention to the analogous detachment of the decidua around the internal os, which had been described by Dr. Haussmann, of Berlin.

Dr. BARNES expressly denied that he was open to the charge of committing the error imputed to him by Dr. Duncan of stating that the placenta was ever attached to the os uteri externum. He had taken special pains to insist that the cervical canal had nothing to do with gestation. He had even sent to Dr. Duncan years ago a tracing of a drawing made by himself from a pregnant uterus, showing the separate cavity of the cervix. With regard to the remaining statements of Dr. Duncan, they would be found to be simply repetitions, in other words, of Dr. Barnes's published account.

Dr. AVELING believed the Society was much indebted to Dr. Matthews Duncan for his accurate and scientific description of the spontaneous separation of the placenta when prævia. We could not be too minutely particular on a subject of such importance, and he believed, with the author, that there were many illustrations to be found in our midwifery works which gave the student an erroneous view of the relative conditions of the body and cervix of the uterus during pregnancy and parturition.

Dr. TILT read a paper on

THE DIAGNOSIS OF SUBACUTE OVARITIS.

The author suggested that the undervaluing of the part played by subacute ovaritis, as a source of disease in women, partly depended on the lamentable facility with which many practitioners, wherever there was pain in the ovarian region, inferred the existence of ovaritis, partly on account of the real difficulties of diagnosis, of which he gave some remarkable instances. He intimated that another reason might, however, be found in the difficulty of making examinations in young unmarried women. He had found that the most frequent sexual diseases during this period of life (between fifteen and twenty-five) were subacute ovaritis and inflammation of the neck of the womb. When the disorders of menstruation resisted good hygienic and medical treatment, he believed they were generally due to subacute ovaritis and cervicitis. The symptoms of cervicitis he described to be the habitual painless passing of a moderate amount of muco-purulent vaginal discharge, with habitual pain in the back; those of subacute ovaritis were constant dull pain deep in the ovarian region, much increased by firm pressure, and extending to the thigh and leg, mammary symptoms, disturbed menstruation, and hysterical phenomena. The positive sign of subacute ovaritis was the finding of an ovoid, smooth, or slightly indented lump beside the womb, or in Douglas's pouch, pressure upon which caused by the practitioner's finger, or during coitus, caused an overpowering and sickening sensation of pain and debility. It might be necessary to confirm this diagnosis by a rectal or recto-vaginal examination. The author expressly stated that it would sometimes occur to a practitioner making a first vaginal examination that, instead of finding any ovarian disease, as he expected, he would detect cervical disease, and in other cases subacute ovaritis would be found when the symptoms would lead him to expect cervical inflammation. He concluded by describing the line of conduct to be adopted by the surgeon for the management of each of the three classes, and sketched the treatment most likely to cure them.

Dr. BARNES thought that many ovarian symptoms had their origin in uterine displacement.

Dr. WYNN WILLIAMS concurred in Dr. Barnes's opinion. He had rarely met with a case of ovaritis without some uterine complication, unless caused by direct violence. He believed the uterine mischief preceded the ovarian, and his experience taught him that on the removal of the uterine ailment the ovarian soon subsided. The same remarks applied to the ovary as to the testicle. Orchitis was seldom met with without previous inflammation of the urethra. He had frequently relieved ovarian symptoms by introducing a stem into the uterus, and he had under his care several unmarried females wearing stems and shields who could not be persuaded to have them removed, dreading a return of their sufferings.

Dr. HEYWOOD SMITH believed the best way of using the double touch was to use the fore finger of the right hand for the vagina and the middle finger of the same hand for the rectum, the left hand was thus left free to make pressure on the hypogastric region. With regard to what had been stated as to ovaritis being associated with or consequent upon flexions or other morbid states of the uterus, he must say that he frequently found patients suffering from ovaritis in various stages unconnected at all with any flexions or misplacements of the uterus or with any metritis.

Dr. J. J. PHILLIPS said that his experience was that so-called subacute ovaritis was a very frequent cause of dysmenorrhœa, and he believed that this ovaritis frequently existed independently of any uterine flexion or peculiar conformation of the cervix uteri. It was very common to find a swollen, hyperæmic, probably inflamed ovary as the only evidence of disease in cases of dysmenorrhœa. The fact stated by Dr. Barnes, however, could not be controverted, that in a large class of cases dysmenorrhœa was due to uterine flexion or some uterine abnormality, and by appropriate treatment not only was the pain relieved, but also the congested state of the uterine appendages. A suitable selection of cases was, however, important, for some of the most troublesome cases of ovaritis had their origin in mechanical interference with the neck of the uterus by incision or dilatation.

Dr. GREVIS remarked that the truth might be between the two views which had been expressed, and that while primary sub-ovaritis was probably rare, yet it might certainly continue to exist as a result of various uterine affections, such as chronic endometritis and mechanical dysmenorrhœa, after these affections had been cured.

Dr. TILT, in reply, stated he had always taught that mechanical obstructions to the menstrual flow and uterine malpositions required especial treatment, but he intentionally omitted to treat of them in the present instance, because they were not of very frequent occurrence between the ages of fifteen and twenty-five; whereas he had come to the conclusion that sub-ovaritis and cervicitis were then common, and were often treated as diseases of menstruation. He did not think that the analogy between the testicle and the ovary should be pushed too far, because the testicle was not subject to any monthly process similar to ovulation.

Reviews and Notices of Books.

A Treatise on the Pneumatic Aspiration of Morbid Fluids. By Dr. GEORGES DIEULAFOY. London: Smith and Elder. 1873.

ON the 2nd of November, 1869, M. Dieulafoy first laid before the Academy of Medicine an instrument which he had named the aspirator. Since that time no less than fourteen such instruments have been invented, all modifications of the original, and the principle of pneumatic aspiration has been introduced into all parts of the civilised world. Nothing more than this is needed to show the importance of the invention, the whole credit of which is undoubtedly due to M. Dieulafoy. The principle of the aspirator and that which distinguishes it from all previous instruments, such as suction or syphon trocars, &c., is the existence of what M. Dieulafoy calls the "previous vacuum"—that is to say, that as soon as the eye of the hollow needle is covered by the skin, it is put in connerion with the body of the pump in which a vacuum has been already prepared, and the needle then becomes a true aspiratory needle, carrying the vacuum with it. Then, if pushed through the tissues, the moment the needle reaches the fluid "the diagnosis is inscribed in the apparatus." The force of the vacuum enables us to use needles infinitely smaller than any of the exploring trocars previously in use. Every good aspirator is able also at any time to be converted into a syphon, the aspiratory force of which is quite sufficient to exhaust an effusion into the pleura or peritoneum. The needles should be constructed by unvarying standards. In this work M. Dieulafoy refers to his needles as No. 1, 2, 3, and 4. No. 1 is, roughly speaking, $\frac{1}{10}$ in. in diameter; No. 2, $\frac{1}{15}$ in.; No. 3, $\frac{1}{17}$ in.; and No. 4, $\frac{1}{19}$. Of these No. 2 is most generally employed, being used in tapping the pleura, bladder, joints, cysts of the liver, and in operating on strangulated hernia. No. 1 is used only for very delicate explorations, or for the extraction of fluids similar to that found in hydrocephalus.

In this work M. Dieulafoy has collected abundant evidence to prove the perfect harmlessness of punctures made by the smaller needles, and we think he has fully justified the assertion which he makes that "it is always possible by means of aspiration to search for a fluid collection, without any danger, whatever may be its seat or nature." M. Dieulafoy gives a few plain rules for the management of the aspirator, which it is well to bear in mind. 1st. Never trust to its being in working order without trying it immediately before use with some water. 2nd. To connect the needle with the vacuum as soon as the eye is covered by the skin. 3rd. If you fail to hit fluid at once, not to squeeze the part, as by so doing you are very likely to do harm by multiplying the points of contact between the needle and the surrounding parts; and, moreover, if the force of the vacuum will not draw the fluid into the needle, squeezing is not likely to be of much use. 4th. Aspiration should not be pushed to excess, or "continued in an ill-advised way to the point of cupping the interior of the cyst." These general principles conclude the first part of the book. The second is devoted to the "Aspiration of Organs." Commencing with the liver, M. Dieulafoy records six cases of hydatid cyst treated successfully by aspiration, the number of operations varying from one to seven. In two out of three in which the operation was performed more than once, the fluid became purulent, and was characterised by a peculiarly powerful smell of sulphuretted hydrogen. In a seventh case, in which the hydatid cyst implicated the pleura, over three hundred aspirations were performed, and at last a canula tied in, the patient recovering. The operations were not always free from unpleasant consequences, such as nausea, pain in the shoulder, fever, &c., but the ultimate success in each case proves the safety of the treatment. The needle to be used in the first aspiration of a hydatid cyst is the smallest; in the later operations, when the fluid becomes purulent, No. 2 must be employed. M. Dieulafoy next proceeds to the treatment of retention of urine by operation, recording twenty cases in which the operation has been performed without accident, the number of aspirations varying from 1 to 23. In one case, after eleven punctures, a little tenderness and redness of the skin was noticed, and, by the advice of M. Gosselin, the aspirations were discontinued, and the bladder tapped above the pubes in the ordinary way. The value of this application of the aspirator can hardly be overrated, the perfect harmlessness of the operation enabling us to have recourse to it at a much earlier period than the old methods of puncture of the bladder, and giving time for other local and constitutional remedies to be applied to facilitate the passage of a catheter.

Successful as the foregoing operations have been, they are quite thrown into the shade by the use of the aspirator in the treatment of strangulated hernia. The idea of puncturing a strangulated hernia is of great antiquity, being at least 250 years old; but for want of a proper instrument it remained only an idea till the invention of the aspirator. The first operation was performed by M. Duplouy, three years ago, and since that time it has been repeated twenty-six times. In no case has any accident happened which could be attributed in any way to the puncture. In twenty of the twenty-seven cases reduction was effected, and in seven kelotomy was afterwards performed, four of the patients recovering and three dying. Thus we may fairly say that in twenty out of twenty-seven cases an operation, apparently as innocent as taxis, after failure of all other means of reduction, saved the patient from the serious risk of kelotomy, and in the remaining seven the patient was in no worse condition for the operation than if aspiration had not been performed. Further experience may possibly show that the puncture is not absolutely free from danger, but with the evidence we have before us it seems clearly the duty of every surgeon to aspirate before proceeding to any severer measure. The mode of operating is perfectly simple: "The aspirator being set, we thrust needle No. 1 or No. 2 sharply into the part of the tumour selected beforehand." Then, turning the cock connecting the needle with the vacuum, "we pass slowly through the tissues in quest of liquids and gases." The first fluid reached will probably only be that in the sac, and we must not be tempted to try taxis by the escape of this fluid and the consequent collapse of the tumour. It is not until we clearly see fæcal matter mixed with bubbles of gas that we can be satisfied

that we have actually punctured the gut. If we do not succeed in obtaining this, the operation must be considered to have failed. The aspiration of gases and liquids being completed, experience has shown that there is no danger in immediately performing taxis. Experience has also shown that as many as three punctures of the intestine may safely be made supposing the effect not to be sufficient without. The operation is so simple that it can be performed by anyone, and so free from danger that everyone should perform it, and we may therefore hope soon to have our statistics enlarged. With regard to selection of cases, it need hardly be said that all those in which there is grave suspicion of gangrene of the gut are not fitted for the operation.

The third part of the work is devoted to the "aspiration of the serous cavities," commencing with the pericardium. Only three cases are recorded, but the results of these were most satisfactory, great relief being experienced in all, although from the nature of the cases two were incurable. The operation by the aspirator contrasts most favourably with all former means of tapping the pericardium; it requires no skill and no special boldness on the part of the operator, and the difficulty formerly experienced—emptying the cavity—is, of course, done away with. By experiment on the dead body, M. Dieulafoy has shown that the distended pericardium is capable of containing thirty-five to forty-two ounces of fluid, and that the most convenient spot from which to puncture such an accumulution is in the fourth or fifth interspace, from two inches to two inches and a third from the edge of the sternum. In order to avoid wounding the heart, the needle must be passed upwards and inwards. The needle used should be either No. 1 or No. 2, the former if uncertain as to the existence of fluid, and the latter when the diagnosis is undoubted.

In the treatment of effusions into the pleura, the aspirator has not proved of any material advantage over the canula and trocar. The operation is certainly easier and less painful to the patient, and, when a fine needle is used, may be undertaken merely for the purpose of diagnosis, a wound of the lung by such a needle being perfectly harmless. In children a cure has sometimes resulted from frequent aspiration of purulent fluid, but in adults M. Dieulafoy confesses it is of no use to wait too long before proceeding to fix in a canula and regularly wash out the cavity. For this purpose he has invented an ingenious canula fitting on to the aspirator, which can then be used for injecting and washing out the pleura. In ascites M. Dieulafoy acknowledges that the ordinary means of tapping are quite sufficient, the use of the aspirator being unnecessary.

The treatment of hydrarthrosis and effusions into the knee by aspiration is dealt with very fully. In all fifty-two cases are collected, including acute and chronic synovitis, suppuration of the knee-joint, rheumatic and gonorrhœal inflammation and injuries. The total number of punctures performed was 152, and of these only two led to any accident. One of these was in a case of severe fracture of the patella, in which aspiration was performed to relieve pain, and the other was a simple case of chronic synovitis, in which the puncture was followed by suppuration of the joint and death in a few days. In order to avoid such accidents, the author points out the necessity of avoiding all manipulation of the joint during the aspiration, and of making sure that the needle is clean before inserting it, and so saving, perhaps, a useless puncture. The result of the cases here collected is certainly such as to encourage surgeons to repeat the operation whenever suitable cases present themselves.

We have thus passed in review all the more novel and important uses of the aspirator, but we have by no means exhausted the list of diseases in which the author has made use of the instrument. In chronic abscesses, lymphatic abscesses, buboes, hydroceles, ganglia, &c., aspiration has been followed by results more or less satisfactory, but for these we must refer the reader to the original work. The book concludes with a detailed description of two of the numerous varieties of aspirators—M. Dieulafoy's rack aspirator, and Weiss's varying vacuum aspirator. This latter is an admirable instrument, but it seems to have one fault—that its action cannot be reversed so as to clear the needle in case it becomes plugged during the operation. In conclusion, we must say we have seldom had the pleasure of reading a more interesting and original work, and we can fully sympathise with the author in the evident pride he feels in his invention.

Origine de la Syphilis. Par EDMOND BASSEREAU, Docteur en Médecine, &c. pp. 49. Paris: J. B. Baillière. 1873.

THIS is a pamphlet the title of which is not so striking as the name of the author. Bassereau is a name well known to all those who have followed the changes, more or less radical, which the doctrines concerning syphilis have suffered for the last twenty years. Bassereau is the founder of the dualistic school; and, although there are still a few dissentients, that school may be said to hold sway at the present moment, and, considering how short-lived certain schools are, has attained a respectable age, as Bassereau's book, "Traité des Affections de la Peau Symptomatiques de la Syphilis," was published as far back as 1852. The work created a great sensation at the time, and among the converts to dualism Ricord himself took a prominent place. France, England, and Germany soon counted many adherents, and it was inferred, as a matter of course, that the founder of the school would continue his labours, strengthen his position, throw more and more light upon practice, and become one of the leaders of the specialty. But Bassereau, on the contrary, stopped short, abandoned his pen, shunned the title of specialist, and has not pursued the path which seemed to promise such advantages to himself and others. These circumstances excited the curiosity of some, and they found that this talented man had been the victim of petty jealousy. Not being a member of the faculty or of the staff of any hospital, he found, when his pupilage was over, the wards closed against him. Investigations on a large scale were now out of the question, and Dr. Bassereau utilised his gifts, his peculiarly engaging manners, and medical experience, so as to become a very successful Paris physician. But his name will still be mentioned with respect and gratitude by those who are engaged upon the difficult problems offered by the study of venereal diseases.

The present pamphlet is written by Bassereau's son, who seems anxious to tread in his father's footsteps; and this first attempt of his belongs to a peculiar department in which Bassereau senior excelled—namely, bibliographical researches among the writers flourishing before and after the breaking out of syphilis. The father's object was to prove that the chancre which poisons the blood was unknown to the ancients, and that some of the authors who wrote after the outbreak had confounded the simple with the infecting chancre, the former of which had existed in all times, whilst the second, the virus of which is different from the virus of the first, dated from the great epidemic of 1495. The son's thesis, however (for the pamphlet is a reprint of the thesis), treats of the *origin* of syphilis, a much controverted subject. He says in his preface that his intention was to write a critical review of all the doctrines regarding syphilis, but that such an examination would have carried him too far, so he has confined himself to the task of searching whence syphilis has come upon the world.

We are afraid this is rather a thankless task. It is not

of very great moment to ascertain whether we are to accuse the companions of Columbus, or whether antiquity was troubled with the complaint. Let time and labour be devoted rather to improving the therapeutics of syphilis, to throwing light upon the diagnosis of the disease, and to endeavouring to find means of really and truly eradicating the malady from the economy. Still it is interesting to learn what the partisans of the antiquity of the disease have to say. This forms the first chapter of the book before us, and the author disposes pretty victoriously of the arguments and quotations of those who support the ancient theory. Of course, to be consistent, he was obliged to defend the modern origin of syphilis, as this belief is one of the main props of the dualistic school. Gonorrhœa, balanitis, buboes, simple sores, vegetations, and other complications have nothing to do with syphilis proper, says the author, and ancient writers simply describe these symptoms without touching upon the characters of the big pox.

Then, if this disease is not of ancient origin, when did it break out first, and through what agencies has it made its appearance? The author, who seems to be familiar with the principal texts, and quotes them with great accuracy, shows in his second chapter that the American theory, as it is called, is pretty satisfactory, though he does not think that the disease was taken to Italy by the Spanish troops under Gonzalvo. He inclines to the belief that the complaint is very properly called "morbus gallicus." M. Bassereau holds, with others, that Columbus's crew spread it in Barcelona, where they repaired on their return from the New World, that the disease by commercial intercourse spread into France, and that the French army took it into Italy. Be this as it may, the weak point of the American origin will always be the unlikelihood, considering voyages were so long in the fifteenth century, of the men carrying with them primary sores for so many months. No doubt the transmission by secondary symptoms is possible, but it is not so energetic as to cause a rapid spread of the disease.

M. Bassereau junior has, in treating this difficult subject, displayed considerable erudition and much judgment in the comparing and explaining texts, without overloading the pamphlet with references and quotations. The problem, however, is not solved. We shall be happy, on the other hand, to take up M. Bassereau's next book, in which he proposes critically to examine the different doctrines now-a-days held upon the syphilitic disease.

REPORT
OF
The Lancet Sanitary Commission
ON
SEWAGE FARMS.

No. I.

THE controversy on the influence of sewage farms on public health, which has of late been carried on so keenly in the daily papers, appears to have worn itself out for the present: any acrimonious feelings which it may have engendered have had time to cool, and the question may now be discussed temperately and with due regard to its vast national importance. We therefore think it desirable to take it up once more, and to present to our readers the results of our own inspection of a few of the most typical sewage farms. Many valuable materials have been collected in regard to these farms in Blue-books and elsewhere. We shall use these materials freely, but shall trust above all to our own observations, which, as our readers will readily believe, will be unbiased by any personal preferences or preconceived ideas. Of course we shall confine ourselves, as far as possible, to the sanitary bearings of the subject. Economical considerations, important though they be, could not be satisfactorily discussed within the limits to which we propose to confine ourselves.

BRETON'S FARM, ROMFORD.

WILLIAM HOPE, ESQ., V.C.

We have chosen this farm for our first report because it presents very simple conditions, and because the operations conducted on it have been carefully studied by the Sewage Committee of the British Association. It was visited a short time ago by a party of members of the British Medical Association, and was briefly described by us at the time;* but on that occasion we were only able to give a short sketch of the general arrangements of the farm and the results obtained upon it.

The town of Romford numbers some 8000 inhabitants. Its sanitary authority is a local board, and a system of sewerage has been adopted, and, to a certain extent, carried out. At first the sewage was thrown into the river Rom, but, stimulated by an injunction in Chancery, the local board, after some preliminary experiments, constructed an iron culvert, by which the sewage was carried to tanks on Breton's farm, two miles from the town. Here they erected two 8-horse-power engines, by which the sewage is pumped to an iron trough about twenty-five feet from the ground, by which it can be distributed over the farm. All this part of the work is done by the local board. The farm is held on lease by Mr. Hope, who, in addition to the rent, pays £600 a year to the local board in return for the delivery of the whole sewage of the town on his farm, he guaranteeing them against any action for nuisance. Mr. Hope complains that at the present time, from the imperfect drainage of the town, he receives the sewage of about 4600 persons instead of about 6000, as he was led to expect.

The farm consists of 121 acres, of which, in the year ending March, 1872, 104 acres were cultivated under sewage irrigation, and no manure other than sewage is ever used upon it. The soil is light and sandy. It is under-drained by pipe-drains fifty feet apart and about five or six feet from the surface, and is divided into plots thirty feet in width and of various lengths. From the trough into which it is pumped the sewage is carried by similar troughs, some of iron, some of concrete, through every part of the farm. Side apertures, thirty feet apart, permit it to be poured at discretion on to any one of the thirty-feet plots, each of which has a gutter down its centre, from which the land slopes gently right and left. When the sewage is admitted to a plot it runs along the gutter for some little distance, until it is arrested by a vertical iron plate or "stop," which causes the gutter to overflow and the sewage to pass laterally right and left through the roots, but not over the foliage of the crops. After a time the stop is moved farther back, and the process is repeated until the whole plot has been sufficiently irrigated. It is obvious that in this way the exact quantity of sewage applied to each crop can be regulated and measured. The object of the farmer being in this case to a great extent experimental, the crops grown under sewage are very various in kind. Cereals, green vegetables, roots of all kinds, potatoes, Italian rye-grass, and even strawberries, figure among the returns. All seemed to us to be healthy, and we were informed that very good crops are obtained; but upon this point we do not propose to enter. The whole sewage of the town actually passes through and not merely over the land. A certain proportion of it is afterwards returned to the tanks, and again pumped over the land. This proportion can be varied at will, but amounted, in the year we have named, to about one-eighth of the whole sewage received. The effluent water, as it leaves the farm, is clear and free from odour, and, as is proved by a great many chemical analyses, is of very good quality. There can be no doubt that it might safely be added to any river which was not

* THE LANCET, August 16th.

at that part of its course used as a water-supply for houses.

We now come to the sanitary conditions prevalent upon the farm. We have paid three recent visits to it, and feel no doubt of the justness of our conclusions in this part of the subject. In the immediate neighbourhood of the tanks and troughs, all of which are open, and to some little distance to leeward of them, the smell of sewage can be perceived, and we were informed that it is sometimes discernible in the road which skirts the farm, though we failed to recognise it here. But in the fields where the sewage is flowing no smell could be detected, and we believe that this is the universal experience of persons who visit the farm. That a considerable mass of sewage collected in open reservoirs should emit a smell perceptible at some distance is no matter for wonder. The only question for consideration is whether this smell is likely to do harm in the neighbourhood. An answer to this question is, in the present instance, easy. No dwelling-houses are situated in the immediate vicinity of the tanks, and we are persuaded that under these circumstances danger of infection does not and cannot arise from their mere existence. The men working on the farm are said to be uniformly healthy, and indeed it is matter of common experience that strong men and women working in the open air do not suffer even from much worse effluvia than those which are exhaled from the tanks. But were things different, were there houses into which the sewer gases could be wafted, we can conceive that great danger might arise. It is one thing to inhale noxious emanations by day and in health; it is another to breathe them during sleep. Even the strongest may, and often do, suffer from sleeping in a noxious atmosphere which their constitutions could resist during day, and to children and weakly persons such a risk would be especially serious. Even, however, if it were necessary for such a farm to be established in the neighbourhood of houses—a necessity which it would always be desirable to avoid, if possible—the risk might probably be averted, or at any rate materially lessened, by covering in the tanks and the principal troughs.

Another very important question which has been raised in regard to sewage farms may, in the case before us, be answered very definitely. It has been argued that fruit and vegetables manured with sewage are likely to be injurious to man, and even that this injury may be communicated through the milk of cows which do not themselves apparently suffer. These fears, as far as Breton's farm and others managed like it are concerned, are entirely chimerical. The sewage is on Breton's farm applied in moderate quantities, and only to the roots of the crops. A crop seldom if ever receives more than two or three dressings; it is a rule on the farm that no crop shall be gathered until fourteen or fifteen days after the last dressing. No animals are ever allowed to graze in fields irrigated by sewage. To talk of danger under such conditions is, we hold, absurd.

In conclusion, we will give a few of the statistics of this interesting farm, extracted, with slight modifications in form, from the report of the British Association Sewage Committee for the year ending in March, 1872. We give the results, as far as possible, in whole numbers.

The total weight of sewage received in the year was 416,787 tons. Of this, 52,466 tons, or about one-eighth, was passed through the land a second time. The weight of effluent water which left the farm was 143,070 tons, or about one-third of the sewage. Of the sewage, 380,227 tons was applied to the 104 acres of crops; the remainder, with the exception of small quantities sold and used in the garden, being filtered through barren land. Thus each acre received on an average 3660 tons, the maximum being 12,695 tons (grass), and the minimum less than 1000 tons. The sewage contained on an average 5·529 parts of nitrogen in 100,000, equal to 1 of nitrogen in 18,086 parts of sewage. The total weight of nitrogen received was therefore 21·0245 tons. At the end of the year this nitrogen was found to have been disposed of in the following manner. Of every 100 parts of the nitrogen received, 10·67 were carried away (mostly as nitrates) in the effluent water; 41·76 were assimilated by and carried away in the crops; while 47·57 remained unaccounted for. Of this last quantity part remained stored up in the soil, and rendered it richer, and part was carried away in the deep subsoil water.

Thus it may be said that in round numbers 40 per cent. of the nitrogen of the sewage was utilised, a result which the Committee regard as very satisfactory, in view of the fact that Lawes and Gilbert, in some of their celebrated experiments, found that only from 40 to 60 per cent. of the nitrogen of solid manure was assimilated by the crops in a single year.

From what has been said, it will be evident that the method pursued at Mr. Hope's and other similar farms is correctly described by Dr. Frankland's happy phrase, "intermittent downward filtration."

The Sewage Committee before referred to presented another report at the Bradford meeting, which confirms its previous results in regard to sewage irrigation. The conclusions of the Committee coincide in the main with those which we have stated, but although "it has not been able to trace any ill effects to the health of persons living around sewage farms, even when badly conducted," we are still inclined to fear that such ill effects may follow under unfavourable conditions, and cannot at present modify any of the opinions we have expressed in regard to the possible danger.

Foreign Gleanings.

ASPIRATING PUNCTURE IN DROPSY OF THE KNEE.

CONSECUTIVE on a communication presented to the *Société de Chirurgie de Paris* by Dr. Dieulafoy, a report was read on the above subject by Dr. Desprès, and ended in a general discussion carried on by MM. Verneuil, Demarquay, Dolbeau, Panas, Marjolin, &c. The conclusions of the report were generally approved of. They are not much in favour of the new proceeding, and may be summed up as follows:—In traumatic hydrarthrosis, the ancient methods are as good as this new one; in rheumatic hydrathrosis, aspirating puncture is of no use; in blennorrhagic arthritis, the use of blisters should be preferred; in chronic hydrarthrosis, having resisted the employment of classical means, aspirating puncture may be employed with advantage; in articular effusions of blood, punctures would be dangerous. In acute hydrarthrosis, Dr. Verneuil said he preferred immobilisation of the limb. Dr. Dubreuilh's case of death through aspirating puncture of the knee was referred to, and generally it was considered that the usual means of treatment were better than the puncture system, whilst they were free from danger.

MODE OF ESTIMATING THE AMOUNT OF HÆMOGLOBIN IN BLOOD.

The maximum volume of oxygen absorbable by a definite quantity of blood taken as unity, being proportional to the amount of hæmoglobin the blood contains, it is maintained by M. Quinquand, in a recent communication to the Académie des Sciences (June 16th, 1873), that in order to determine the quantity of hæmoglobin present in any case, it is only requisite to ascertain in the first place once for all the weight of hæmoglobin which corresponds to a cubic centimeter of oxygen when the blood has been agitated with air; and, secondly, to determine exactly the quantity of oxygen that the blood retains after being saturated. Experiment shows, in point of fact, that the maximum quantity of oxygen absorbed by the blood can be employed as a measure of the amount of hæmoglobin present in a given sample of blood.

TWO CASES OF INTERMITTENT UTERINE POLYPI.

The above interesting cases are recorded by Professor Pajot in the *Gazette Obstétrique*. In one case (patient aged forty, and mother of two children) menstruation was over-abundant and was attended by the escape of large clots of blood. The woman complained that she often felt a tumour between the labia. On examination with the finger, a soft body with a hard nucleus was discovered in the vagina, and the index could follow up the growth along a pedicle into the cervix. On careful examination with the speculum, the existence of a polypus was made out, and the above diagnosis confirmed. This was shortly after the menstrual period. Dr. Pajot decided to remove the polypus by means of the écraseur. A day was appointed and chosen

between two menstrual periods, but on examining the woman, no tumour could be seen in the vagina, and only its convex surface could be discovered, bulging a little out of the os. Efforts to take hold of it and draw it down were unavailing, and the operation was postponed until the patient would let Dr. Pajot know that she again felt the tumour between the labia, which she did a few days after. The tumour was then removed with a small écraseur, and the surface cauterised with perchloride of iron. There was no hæmorrhage. Three distinguished medical men had previously examined the patient (during the time of intermittence, obviously), and had asserted that the tumour only existed in the woman's imagination. The second case was quite similar. These are the only two cases ever noticed by Dr. Pajot in his extensive experience of diseases of women.

GENERAL TUBERCULOSIS IN A FŒTUS OF SEVEN MONTHS AND A HALF.

Case recorded in the July number of the *Lyon Médical* by Dr. Chabrin. A woman of twenty-nine years became phthisical during her third pregnancy. She gave birth to a girl, and shortly after both the mother and child died. In the mother, the tubercular lesions were found especially developed in the lungs; in the child the abdominal organs were especially affected: the liver, spleen, and epiploon were found full of granulations. The author explains this difference in the localisation of the lesions by the activity of the respective organs. In the mother, the lungs, being more active, became the seat of tubercular lesions; whereas in the fœtus the abdominal organs (liver, spleen, &c.), being especially active, were affected by the disease.

THE NERVES OF THE PLEXUS CHOROIDEUS.

At a late meeting of the Royal Medical Society of Vienna, Dr. Benedikt stated that he had been successful in tracing nerves directly into the inferior choroid plexus from the medulla oblongata. In order to exhibit the nerves the fresh choroid plexus must be placed for a short time in Müller's fluid, and then in a solution of caustic soda, when double contoured nerve-fibres may be observed entering the border of the plexus. The fibres can be traced from a fissure in the medulla oblongata running obliquely upwards and outwards from the funiculus teres over the ala cinerea. An oblique cut in this vertical direction shows a band of ascending fibres, from which the branches to the plexus are derived.

REST IN LOCOMOTOR ATAXY.

In the July number of the *American Journal of Medical Sciences*, Dr. Weir Mitchell insists on the great benefit of rest in the above disease. In cases of locomotor ataxy in which the occurrence of various accidents, such as fracture of a leg, had compelled the patients to take absolute rest in bed during some time, the symptoms, and especially pain, were considerably amended, and in some instances the course of the disease was impeded or slackened. One case was experimentally conducted. A sufferer from an intense attack of the disease was subjected to absolute rest without any other kind of treatment, and considerable amendment of all the symptoms was the result.

TREATMENT OF BURNS AND SCALDS.

Dr. de Breyne highly recommends the following treatment in *L'Union Pharmaceutique*:—Hydrate of lime (newly precipitated), forty-five grains; glycerine, five ounces; chloric ether, forty-five drops. It makes up a transparent, colourless liquid, with an agreeable odour, and an alkaline reaction, according to the dose of hydrate of lime. It calms the pain, and prevents or abates inflammation.

ST. GEORGE'S, HANOVER-SQUARE, (PROVIDENT) DISPENSARY, MOUNT-STREET.

THE St. George's, Hanover-square, Dispensary has become a provident dispensary. The experiment of converting a prosperous and popular London dispensary of the old kind into a purely provident dispensary should be regarded with interest, not the less so if the change has been anxiously made with much difference of opinion both amongst the governors and the members of the medical staff, as was the case here. There are some peculiarities in the case of this dispensary which make the experiment at once more delicate and difficult. One of these is to be found in the rules, which require that the honorary medical officers shall be of the order of consulting practitioners, physicians, surgeons, and physician-accoucheurs, who only practise in the special way of physicians, surgeons, or physician-accoucheurs, avoiding pharmacy. It will be curious to see whether practitioners of this stamp will think it consistent with the dignity of their order or with the consideration due to general practitioners to divide the money arising from the periodical payments of members amongst themselves. In other provident dispensaries there are consulting members on the staff, who, however, are seldom consulted, but their position is purely honorary, and they do not receive any payment.

This, however, is by the way. The St. George's Dispensary became a provident one on September 1st. The change, suggested by the Charity Organisation Society, was duly considered by a sub-committee appointed for the purpose, who made a most discriminating report on the arguments *pro* and *con*. The dispensary may be congratulated on having a resident medical officer—Mr. S. P. Lee—who takes a great interest in the experiment and spares no pains to make it as easy and acceptable as possible both to the patients and to the medical men.

The constitution of the committee will continue the same, consisting of purely honorary members—that is, of those who subscribe to the institution on purely charitable grounds.

The persons whose benefit is contemplated are those who "are unable to pay the usual expenses of medical aid in sickness, and, as a rule, small tradespeople, artisans, workpeople, servants, and others whose average gains or wages do not exceed forty shillings per week." The rates of subscription for members are as follows:—

	Per Week.	Per Month.	Per Qr. of 13 wks.
For each person above 16 years of age	1½d.	6d.	1s. 6d.
Where a husband and wife are both members	2d.	8d.	2s.
For persons under 16 whose parents are members	1d.	4d.	1s.
For persons under 16 whose parents or guardians are not members	3d.	1s.	3s.

Where the children under 16 exceed three, no more than three need be paid for.

Where the applicant is actually suffering from sickness, an entrance fee of 2s. 6d. will become payable on admission, besides the usual subscription.

It is, of course, premature to speak of the effect of the change. On the old system about sixty patients were seen on an average at the dispensary, and two or three at their own homes. The average daily attendance of patients at the dispensary now is about thirty. It is to be remembered that this is a season in which there is generally less to do at dispensaries, and in which the regular staff of a dispensary is apt to be keeping holiday. 267 members were entered in the books in the first few weeks, including of course, in many instances, several members of one family. Many of these were cases actually under treatment when the change was made. It will be curious to see whether the half-crown rule for the entrance of those in actual sickness will be relied on, and deter persons from being regular and constant members. The fitness of applicants is judged of by the committee after due inquiries by the resident medical officer. With great propriety, patients presenting themselves with a governor's letter in the old way are prescribed for once. They are duly informed of the change. In almost every case we are informed they have returned and become regular members—we presume by the payment of half-a-crown. The new rules, of course, require a somewhat minute inquiry into the circumstances of applicants by the resident officer, who informs us that he has scarcely met with one case in which the applicant was unfit for the benefits of the charity. This experience should check the tendency of some to believe that these institutions are invaded by hosts of unfit persons.

THE LANCET.

LONDON: SATURDAY, OCTOBER 18, 1873.

IT is very easy to understand and appreciate the dislike which people in this country entertain to the commencement of an expensive undertaking, the end of which is uncertain, and the object of which possesses no earthly interest to a vast majority of them. Added to this, the Gold Coast has the reputation of being one of the most unhealthy climates on the face of the earth as far as the constitution of Europeans is concerned, and the physical features of the country are in themselves great obstacles to military success. Then there are many persons who think we have drifted into this war from our own want of proper political foresight and from bad management, all of which may be perfectly true; but we are not likely to diminish all these difficulties by keeping them constantly present before the mind. If the country be so deadly as it is stated to be, and if the Ashantees be the formidable enemies that they are represented, it of course becomes a question whether we had not better withdraw our troops from the place altogether, instead of maintaining a sham protectorate which at the present time can scarcely be said to exist even in name, and for which we have so long been subjecting ourselves to a chronic state of warfare. Rightly or wrongly, we apprehend that people of all shades of political opinion are agreed, under existing circumstances, as to the necessity of prosecuting this war. Without seeking in the least to underrate its dangers and difficulties, our object has been to state the opinion we have formed from a careful study of the materials within our reach, and from a comparison of the statements of different authors we have consulted. We have taken deliberately a middle course in regard to the dangers of the forthcoming expedition, not because it is the most facile and safe rule to follow on all occasions, but because we believe it to be that most consistent with facts and previous experience. Of course the season may turn out an exceptionally unhealthy one, and the loss by death and invaliding may be enormous. One thing is clear: the expedition can scarcely prove a greater failure than it has been prophesied that it will be. But we contend that it is the proper, as it is certainly the only practicable, method of procedure in an undertaking of this kind, to procure, first of all, the best data within our reach, and, after analysing it, to form the best judgment we can. The military aspects of the expedition must be left, of course, to the judgment of the officer in command; we are only concerned with its sanitary bearings. We may venture, however, to say that Sir GARNET WOLSELEY is an eminently practical, clear-headed man, and that he has obviously taken the best course that could be adopted—viz., after making some preliminary arrangements in this country, to proceed to the future scene of his operations, so as to ascertain all the facts on the spot, and determine as to the best course to be adopted. Supposing that he deems the undertaking too hazardous, on medical or military grounds, to be attempted at all, we give him the credit of possessing the moral courage to say so. And as regards the sanitary arrangements, we do not think that these could be placed in better or more experienced hands than those to which they are confided.

The Ashantee kingdom, with the so-called protected territories, embraces an area of about 95,000 miles. The country may be termed a plateau or tableland of from 1500 to 2000 feet above the sea-level, rising gradually to the foot of the Kong mountains. The Aquapim hills near Accra rise to 1500 or 1600 feet. But the entire district from about forty miles north of Coomassie to the sea is covered with a dense bush. The population of Ashantee is estimated at 1,000,000; and the warriors at about one-fifth of the whole population. The climate is very hot; but it is generally deemed more healthy than that of Sierra Leone. Cold nights succeed hot days. The unhealthiness of the coast is ascribed to these daily variations of temperature, and to the dense miasma that rises, more especially during the unhealthy rainy season, from the swampy valleys in the neighbourhood of rivers. The interior, though covered by forest, is comparatively healthy; and the climate of the higher ground, according to those who have been there, is not injurious to Europeans. Happily, cholera and yellow fever are unknown. The Ashantees are a very warlike tribe. They are supposed to be well supplied with firearms, but not so well with the necessary amount of ammunition. They used to obtain both these from the Dutch settlements; but they have now to depend upon supplies smuggled up by the rivers Assinée and Volta. Beyond the low maritime districts, as we have said, the climate is healthy, and the soil very fertile, especially about the district of Axim. The distance to be traversed from Cape Coast Castle to Coomassie is about 170 miles; and there is no animal transport of any kind at this part of the country.

It is very important to remember that all seem agreed on one point—viz., that the expedition must be undertaken and limited to the healthy season, and is not to be extended beyond March. The appalling sickness which befell the force of Marines may be fairly ascribed to their having been landed at the wrong season, and lodged in the worst localities, besides being badly supplied, and probably overworked.

It was about 180 years ago that the existence of an Ashantee kingdom was first made known; and the results of our encounters with its warriors have been most damaging to our military prestige. The campaigns have been always undertaken at the wrong season, and the troops have been but badly supplied with proper provisions. Before Coomassie, which is a perfectly open city, can be attacked with any chance of success, the Ashantees must be driven back over the Prah. With the fall of Coomassie, the power of the Ashantee kingdom will be shaken, and the neighbouring races, as well as ourselves, probably freed from the plundering raids and attacks to which both are now alike subjected. That it is possible, with care and foresight, to carry out such an expedition from a sanitary point of view, is proved from the fact that in the ex-

pedition by the Government of the Netherlands to Kwassie-Kron in 1869, the troops for two months had not a single case of fever, and but three men were killed by the Ashantees. Their field flasks were, on that occasion, filled with cold coffee, and no spirits were allowed to be issued on the march. Again, we are told that in 1864 about 400 men, sailors and marines, were landed from the *Rattlesnake*, and remained on shore for four months, with the loss of only two men. The grog shops of the station were then closed by martial law, and the greatest attention was paid to preserving the health of the men. Our conclusion then is, that there is a certain amount of risk to be encountered, and for the rest it is an unknown quantity; but we do not think, if the campaign be carried out in the way we have sketched in previous articles, that it need necessarily be followed by the disastrous results that have attended other expeditions undertaken under what will, we trust, prove to be very different circumstances.

BALZAC'S delightful "Médecin de Campagne" contains, as some of our readers will remember, a description of how Dr. BENASSIS stamped out cretinism from an extensive valley in the Savoy. The good doctor began by removing all the hopelessly confirmed cases to a distant canton, though their deportation was a matter of much difficulty, from the superstitious reverence in which they were held as mysteriously "visited by GOD." He next built cottages on the rising ground, with a warm, bright exposure, which, after much persuasion, he got the poor people of the valley to occupy, enamoured as they were of the damp, sunless cabins in which they hibernated rather than lived. Then he encouraged them in dairy-farming, in gardening, in basket-making, and in other industries appropriate to the locality; and, finally, he opened up roads connecting the hamlet with the bigger towns of the canton, so as to foster traffic and the competition that it brings. In ten years' time the place was not to be recognised by those familiar only with its former self. To the "*village sans soleil, autant dire sans âme*," had succeeded a thriving township. The squalid superstitious population, hardly human when not wholly imbecile, was replaced by a healthy, prosperous, cheerful peasantry. Cretinism had become so conspicuous by its absence as quite to anachronise JUVENAL'S question—

"Quis tumidum guttur miratur in Alpibus?"

That Dr. BENASSIS turned his liberality to better account than in limiting it to the erection of a hospital was virtually enforced by Lord DERBY the other day at the annual meeting of the Royal Albert Asylum at Lancaster. "Every town or village," said his Lordship, "thoroughly ventilated and drained; every model lodging-house set up; every case in which healthy labour is substituted for unhealthy labour; every brain normally employed; above all, every individual rescued from the slavery and degradation of habitual drunkenness,—does something to prevent the necessity for establishing and keeping up institutions of the kind." Such institutions, indeed, are the pathognomonic symbols of an ill-constituted and ill-ordered society, of a defective or misapplied education scheme, and of an inadequate system of State medicine. No doubt the physical and mental misery writhing around us is a strong temptation to multiply them. As the ministrants of immediate if only partial relief, it is much better to be with them than without them. But let us not lose sight of their true purpose and their real value. They are at best but provisional in their inception and working. The greater part of the usefulness of an asylum as of a hospital consists, as Lord DERBY well puts it, in its function as a school where the particular complaint may be studied, "not merely that we may know how to cure it and how to alleviate it when it comes before us in incurable cases, but, if possible, that we may trace it back to its cause and so guard against it in the future." In this view Lord DERBY is sustained by the testimony of the Scottish Commissioners in Lunacy, who in the last of their able reports look rather despondingly on the success of asylums as places of cure, and value them—particularly the asylums for the imbecile young—as schools of professional training, in which, while the patient may possibly recover, the practitioner is certainly improving the preventive side of his art.

Principiis obsta remains the golden rule in dealing with disorders, physical or mental; and the more civilisation advances, the more religiously will it be observed. The progress that has been made in the difficult and indeterminate path of cure affords at once an earnest and an impetus for the consummation of prevention. The improved treatment of the insane, at whatever stage of their malady they are taken, is one of the brightest pages in the history of Humanity. Our readers are familiar with the successive transformation-scenes between the *oubliettes* of thirty years ago and the palatial manor-houses called "asylums" of the present day. The demonstration that the insane adult may be cured, and in every case be relieved, has prepared the public for the belief that the imbecile young may be benefited. Even if the complete reclamation of these latter to the normal state is rare, their rescue from their semi-brutish condition is an every-day achievement. In a great number of cases they can be made self-sustaining; in the vast majority they are at least trained to do without being watched, or, anyhow, to be no longer a source of annoyance, disgrace, or danger to those about them. Their conversion from idlers into workers is a distinct gain from an industrial point of view. Their acquired independence of watching allows others to engage in what otherwise they would be kept from—useful and productive labour. Finally, the education of the heart, to which the establishment and working of asylums like those at Earlswood and Lancaster inures the public, is itself, as Lord DERBY justly remarks, most important, as an embodiment of the principle "that a human being is to be respected and valued as such, not for his capacity of productive labour, not merely for the sharpening of his wits, not because there is anything about him which is pleasant to see or agreeable to have to do with, but simply because he is a member of the human race, born on English soil, and therefore in that double capacity having a claim upon us." Nor must we lose sight of another consideration which Lord DERBY touched upon but lightly. The professional training such institutions afford becomes daily of higher importance. Insanity may not be on the increase, but assuredly nervous diseases are. Neuroses of a kind more complex than have in recent years been recognised are "casting their shadows before." The

large space which faradisation now fills in therapeutics indicates significantly enough the spread of the disorders with which it was specially evoked to deal. Thanks to BENEDIKT and MEYNERT, its application to the imbecile young has thrown a new light on its restorative power, while demonstrating what a training-ground for the treatment of nervous diseases such a *clientèle* may become.

WE have received copies of memorial statements addressed by medical officers of the British service serving in India, from which we gather that the late Warrant has excited all the dissatisfaction in that country which it did in this. It is scarcely possible to say anything very new on subjects that have already provoked so much criticism in this country; but the documents are ably drawn up, and have evidently been the result of careful deliberation.

There remains no doubt in our minds that the privileges granted by previous Warrants should never have been touched. Those medical officers who entered the service under the conditions of the Royal Warrant of 1858 occupy a very clear and logical position, for example, in regard to the matter of forage. They had a guarantee that, on attaining a certain rank, they would become entitled to certain privileges, of which forage was one; and they now find to their dismay that what is guaranteed in a Royal Warrant under one Government can be modified first by a War-office circular, and ultimately cancelled by a Royal Warrant under another Government. The ruling of the War Office may be perfectly sound in principle—viz., that allowances should depend upon duty, and not on rank; but it is not in any way pertinent. The authorities adopted another principle when these medical officers entered; and it cannot now be abrogated without involving a distinct breach of faith. If Mr. CARDWELL had thought fit to guide his action in accordance with this principle in regard to all future medical officers, not a word could have been said as to its injustice. It has been sought to establish a parallel between the newly appointed field officers of the Royal Artillery and the medical officers in respect of this question of allowances; but, in reality, no parallel exists. The former had been newly appointed to a rank shorn of certain privileges; but the general body of medical officers, and not those newly promoted merely, have found their privileges curtailed. If published documents and long-established custom are to be set aside in this way, the position of public servants will become intolerable. The ground for confidence will be cut away, and no one will be able to prognosticate that a principle of action which to-day involves forage, may not to-morrow include his pension. We hold, too, that in regard to relative rank, seeing how much his happiness depends upon this, a medical officer's position should be according to the date of his commission, and not according to his regimental seniority; for he no longer forms, in fact, an integral portion of a regiment. We do not believe that there was any necessity for removing medical officers from their regimental appointments after the arbitrary fashion that was adopted; and it is clear that it was not contemplated in the original scheme for reorganising the medical service. In one of the memorials forwarded to us, we read that, whilst all other officers of the British service in India, or elsewhere, seldom experience any difficulty whatever in obtaining ample periods of leave for various purposes, the officers of the British Medical Department serving in India and elsewhere are not only not allowed more than six months' leave for the recovery of the most seriously impaired health, but are denied sufficient leave for professional improvement or attention to private concerns. This certainly seems to us a hardship, and, in the case of sickness, the distinction is a very invidious one.

We have no hesitation in saying that Mr. CARDWELL has missed a great opportunity. There is need for a clearer recognition of principles in the conduct of public matters; and what might have been a new comprehensive system of medical organisation has been wrecked from lack of courage as from lack of skill. We have all along contended for the unification of the department on the broad and simple basis of allowing the Medical Service to manage its own affairs entirely, and holding it responsible for such management; and we have claimed for it a right to the possession of powers equal to its responsibilities. The new Warrant is a tinkering compromise, resting upon no logical principle. In so far as it implies, but fails to express, that the service is no longer two bodies, but one, it seems to indicate a tentative experiment on the part of the Government to adopt the new organisation; but the principle has been grasped so lightly, if at all, that it must prove a source of embarrassment to those charged with its administration. There should not be any room for the existence of a shadow of doubt on the part of any medical officer as to his exact position; and he should either be an integral part of a regiment or he should not. Attached to a regiment he must be, and no gentleman would desire to enjoy the privileges and amenities of a regimental life without bearing his due proportion of the expenses these entail. But we contend that the sooner we have a Royal Corps of Surgeons like the Royal Engineers or Artillery, with well-defined functions and powers adequate to the discharge of them, the better. What is best for the service as a whole is, in reality, best for all the units of that service; and if the general staff system were efficiently and thoroughly accepted as a working principle, there would be no occasion to talk of three years or five years in connexion with regiments nor of any particular rank as giving a title to become the medical officer in charge of a corps. The benefit of all should be considered, and the working of the department should be founded on what was best for the public service, and best and fairest for the medical officers collectively as a body. That is the only way to get the right men in the right places, and to efface the existing inequalities in regard to foreign service of which men now so much complain.

AN Association of "persons of fair culture in the country, taking an interest more or less special in particular questions affecting the well-being of the community," ought to represent a force capable of accomplishing no inconsiderable amount of good. Such a body, one would suppose, might aspire to be something more than the mouthpiece of the "generally received popular opinion of the country"; might rather, under intelligent guidance, hope to educate the public up to the formation of sound opinions upon social questions—to be real heralds of and leaders in social pro-

gress, not merely talkers about what other people are doing or saying. We are far from implying that the Social Science Association has hitherto done nothing to justify its existence, but we have our doubts whether its Annual Congress is not a mistake. For the purpose simply of expressing public opinion upon the variety of subjects, technical as well as general, embraced in the Congress programme, it has an overwhelmingly superior rival in the public press, which has the great advantage that sustained action always gives over isolated effort. And when we find the President of the Norwich Congress claiming for it no higher title to consideration than that of being a branch of Parliament out of session, it appears to us that the time has come when the Association might advantageously extend the interval between its Congresses to a length which would give them a vitality and an interest that do not now belong to them. We find ample justification for this opinion in the remarks with which Lord HOUGHTON closed the Congress. As the result of his week's experience, he appears to have felt it necessary to suggest that there might be some amendment in the character of the papers read, and that there ought to be "a more rigid power of excluding papers which had been already well debated and discussed, and on which it was very unlikely that anybody could have anything new to say." To be able to vouch for the "singular absence of anything that could possibly offend," as well as of anything "commonplace" or "very extravagant" in the papers and discussions, does not sound very eulogistic, but rather prompts the rejoinder, "Qui s'excuse s'accuse."

If we turn to the proceedings in the Health Section, we observe little or nothing to modify the conclusion that the Association wants, metaphorically, "turning out to grass" for a season. We gather from the published reports that only one or two of the subjects discussed excited sufficient interest to attract more than a "meagre attendance," and we even read of one gentleman who had an audience of three persons for a paper read by him. A lively encounter between Mr. SMEE, Mr. HOPE, Dr. CARPENTER, and others, upon the sewage question, must have been a godsend amidst the dulness which seems to have generally reigned over the Health Section; but people will form their own conclusion as to the utility of such a discussion from the remark of General SCOTT, that the inhabitants of Norwich would really gain very little new information therefrom to enable them to solve the difficulty lying at their own doors. That verdict strikes us as being of general application to the proceedings in the Health Section as a whole. "Suggestions" embodying for the most part the simplest elementary doctrines of sanitary science are becoming too wearisome; and one begins to ask what is the good of perpetually talking about such things in Social Science Congresses, when the talkers are content to let those who have the power of action go on in a groove of their own, wholly regardless of the opinion entertained by such assemblies.

How far these Congresses are entitled to the credit which their supporters claim for them of spreading a wider interest in sanitary matters we need hardly stay now to inquire. Granting that, if they do no good, they at least do no harm, ought the Social Science Association to be content with such a position? An organization like theirs seems to us capable of better things; but to accomplish this they must be content to discard the mere talking element, and set themselves seriously to work in another direction—namely, in bringing direct influence to bear upon the Legislature. Let them determine not to meet in Congress again until they have done something which is worth the telling.

Medical Annotations.

"Ne quid nimis."

THE ADULTERATION ACT.

SOME of the reports recently made to local authorities by health officers and analysts reveal several unsatisfactory points in connexion with the working of the above Act. Dr. Tidy in his report to the Islington Vestry "protests against irregularities in the working of the Act." "To purchase articles," he says, "irregularly, to find them adulterated, and then to tell the tradesman, which the Act does not sanction, rather than to summon him, is merely playing with an important Act of Parliament." If inspectors or persons authorised to purchase suspected articles have been guilty of such conduct, it seems to us that they should at least be warned that a repetition of such conduct would necessitate their dismissal. The proper line of conduct for inspectors and authorised persons is distinctly laid down in the Act of Parliament. They are to "procure and submit samples of articles of food or drink and drugs, suspected to be adulterated, to be analysed by the analysts appointed under this Act, and shall, upon receiving a certificate stating that the articles of food or drink or drugs are adulterated, cause a complaint ... to be laid before a justice of the peace, and thereupon such justice shall issue a summons," &c. We are fully in accord with Dr. Tidy when he says that "we should allow no false feeling to prevent our putting a stop to what has been too long an enormous source of addition to the money-bags of the fraudulent."

Dr. Tripe in his report to the Hackney District Board states that he commenced the analysis of articles of food in July last. He then found that not one of eight samples of milk which he examined was unadulterated. He found much improvement in a second batch of samples analysed a month later, and, "indeed, the quantity of cream was so large in all these as to induce a belief that the inspector was known, and the milk was taken from the top without previous stirring." All the samples of green tea analysed were found to have been "faced." In two samples of mixed tea the amount of foreign matter was nearly 2 per cent., but he did not find any sand or iron-filings therein. All the articles analysed had been bought by the inspector, and it had been found that in all instances parties bringing food for analysis objected to pay the fee which had been fixed by the Board.

With regard to the adulteration of tea, the *Produce Markets Review* (which may be supposed to give the grocer's view of the question) has some interesting remarks in its number for the 27th ult. It makes the statement that "several cases have occurred in which retail grocers who have been publicly charged with adulterating tea have succeeded in proving that the analysts who had ordered the prosecution were entirely mistaken, and that the tea was perfectly pure." It then goes on to express its disapproval of many of the analysts who have been appointed, and says: "A doctor is no more likely to be an analytical chemist than a general is likely to be a practical manufacturer of gunpowder." Tea is liable to contract many foreign ingre-

dients simply from its mode of manufacture. Dirt, dust, leaves, and many other foreign matters are liable to fall into it, and the fact of its being roasted over a charcoal fire will account for the bits of charcoal which are often found in it. A grain or two of rice will often fall into the tea because the Chinese are accustomed to eat their meals where the manufacture of tea is carried on. Lastly, bits of lead, wood, and paper get mixed with it from the chest. According to this, the Chinese are a most virtuous and over-abused nation, concerning whom many erroneous impressions are afloat.

The *American Grocer*, however, refuses to throw its protecting ægis round the celestial tea merchants, and makes a few statements which are more in accordance with our preconceived notions. It describes how green and black tea are made from the same plant, the former being coloured by a mixture of indigo and gypsum. It also tells us how teas that have been "damaged by water" (a wide expression) are worked up again in hot pans, and coloured with turmeric, Prussian blue, and gypsum. "Other 'ways that are dark' are also in use. Tea-dust and siftings are often largely added, iron-filings, willow-leaves (of which immense quantities are used), rice, flour, gum, the sweepings of warehouses, mixed with 30 or 40 per cent. of earthy matter, are made up, and placed on the market." We have little doubt that the Adulteration Act will do something, in an indirect way, towards the improvement of Chinese morals.

THE NEW REGULATIONS AS TO HOSPITAL STOPPAGE.

THE wisdom of the new ruling of the War-office authorities for altogether stopping the soldier's pay whilst in hospital from causes within his own control appears to us very doubtful. As far as the principle itself is concerned we concur with the Minister for War in thinking it most unfair that the soldier whose disease has indubitably resulted from the discharge of his military duty should be subjected to the same rate of hospital stoppage as another whose ailment is clearly a self-induced one, and who for the time being escapes his share of duty, which must fall to the part of his comrades to discharge. But this anomaly would have been easily redressed either by relieving the former class of a hospital stoppage altogether, or, if this could not be done, by making a distinction between the two classes as to the amount paid in this respect in favour of the former. As it is, the soldier whose disease is the result of vice or intemperance will consider the stoppage of the whole of his pay as a great punishment, and this will lead to attempts at concealment of disease on the one hand, and tend to engender an improper feeling between the sick soldier and his medical attendants on the other. Moreover, if the new principle is to be applied with any chance of a successful working, the lines of demarcation between the one class of cases and the other will have to be very accurately defined—more accurately than it is found to be in practice, for many of the ailments of our soldiers, like those of other people, are the result of multiple and mixed causes instead of a simple and easily determined one. Some of the diseases to which soldiers are liable are very frequently the remote effects, wholly or in part, of ailments contracted years before, and it would be monstrous to inflict a life-long punishment on any one for a disease contracted in youth. Logically we have only to go a step further, and punish the children unto the third and fourth generation, to see the extent to which this principle might be carried out. Unquestionably there are classes of disease which are clearly and directly traceable to causes within the control of the individual affected by them, and to such, and such only, should the new ruling be applied. All doubtful cases, as well as all those that are the indirect or remote effects of such causes, should invariably be given in favour of the soldier.

RAILWAY TRAVELLING.

ACCIDENTS have been so frequent of late, and, as is always the case in the recess, they have been so fully reported in the daily press, that we may be said to have supped full of railway horrors, and railway travelling has become almost insupportable to persons of nervous temperament, whose thoughts are solely occupied during a journey by speculations on possible dangers. Mr. Fairlie's letter on the subject of railway travelling must be full of unspeakable comfort to those who are compelled to spend much time in journeying. Mr. Fairlie points out that our rates of speed are most dangerously irregular, and that while trains not unfrequently "crawl" up gradients they "fly" down them at a speed sometimes of nearly eighty miles an hour. "When a speed of fifty miles an hour is exceeded, the succession of objects presented to the eye and mind of a driver becomes too rapid for accurate observation and discrimination. He can no longer look ahead and see plainly and think clearly, but objects seem to be in a whirl, and to be upon him before he knows what they are. The very speeds which call for the exercise of excessive caution are productive of such confusion and bewilderment that they render even ordinary caution less likely to be observed." This is certainly true, and we have little doubt that the real blame of many an accident lies not with the driver but with those who have had the arrangement of the weight and time of the train, and who have allowed him to make up for delays by going at a speed which may be called intoxicating. Mr. Fairlie proposes to establish comfortable sleeping cars, in which travellers may really rest, and then, the traveller being quietly asleep, and time of less consequence, he proposes to reduce the speed to an even twenty-five miles an hour. A traveller will thus arrive at his journey's end refreshed with sleep, and if suitable accommodation be provided for him at the terminus, he will be able to perform his toilet, get a comfortable breakfast, and save his hotel bill. All this sounds almost utopian, but we sincerely hope that Mr. Fairlie will be able to imbue the railway companies with his views. What he says is certainly true, and we readily endorse it, that "the effect on the nervous system of travelling slowly but surely in a reclining posture is very different from the effect of being whirled furiously along in a state of wakefulness, trying to count the telegraph posts, or to find out the reason of any unusual noise or odour."

ON THE ALBUMINOUS SUBSTANCES OF THE HEPATIC CELLS.

IN an essay published in the April number of *Pflüger's Archiv*, M. P. Plósz gives the results of his observations on the protoplasm and albuminous compounds contained in the hepatic cells. It is well known that the liver-cells undergo marked changes soon after the removal of the organ from the body. Sections of the fresh liver, even when free from blood, always have an alkaline reaction; but if kept for a short time at ordinary temperature, and still more quickly when at blood temperature, they become acid. The tissue of the liver as a whole becomes also more resistant and rigid. M. Plósz first describes the characters of those cells which have become altered by post-mortem changes, or, as he terms them, cells in the state of rigor mortis. To examine these, all blood, bile, and lymph must be removed from the liver by injections of weak solution of common

salt through the appropriate vessels for an hour or two. The liver then appears pale, and neither hæmoglobin nor glycogen can be detected in it. Some not inconsiderable quantity of soluble albuminous compounds is also diffused out and washed away. The liver is then finely minced, and pressed through fine linen. The pap is treated with a 0·75 per cent. solution of common salt, and set aside for the cells to precipitate. The supernatant fluid can be drawn off in a few hours, and is found to be opalescent, partly owing to the presence of a little glycogen and partly owing to extremely fine granules which proceed from broken-up cells. When these have settled, or after filtration, the clear fluid is found to contain—1. An albuminous compound coagulating at 45° C., and not redissolving at a higher temperature, soluble in solutions of common salt, sulphate and carbonate of soda, hydrochloric and acetic acids. It closely resembles the albuminous substance found by Kühne in muscular fibre. 2. An albuminous nuclein combination, which coagulates at 70° C., and only differs from the preceding in this point. It agrees in all its characters with the albuminous compound found by Miescher in the nuclei of pus-cells. If the cells exhausted with the 0 75 per cent. of common salt be now treated with a 10 per cent. solution, a considerable quantity of an albuminous substance is obtained coagulating at 75° C., which is precipitable on the addition of much water and by an excess of concentrated solution of common salt, and presents other features showing that it belongs to the globulin-like albuminous bodies, and closely agrees with myosin. The liver-cells from which the above albuminous substances have been extracted yield nuclein.

ADDRESSES AT THE PROVINCIAL SCHOOLS.

WITHOUT claiming for Owens College, Manchester, the credit so lightly accorded to it by Sir J. Kaye Shuttleworth, of being our first medical school to possess a laboratory for experimental physiology, we may yet congratulate it on the favourable auspices under which it prosecutes that field of science. Dr. A. Gamgee is one of the most accomplished of that little band of Scotchmen whose contributions to physiology have already acquired European acceptance, and his accession to the physiological chair in Owens College has given to its entire medical faculty an impulse which was significantly conveyed in the address with which he opened the session. He dwelt with much truth on the evils of centralisation in the prosecution of science—evils which had been avoided by the Germans and fostered by the French, with what result the world of *savans* knows. He also insisted on a point in which Owens College bids fair to show an example to her educational rivals—the advantage of thorough preliminary culture before the commencement of purely professional study. In the very perfect system of education pursued in the gymnasia of Germany, and in the average German student's possession of a greater amount of both literary and scientific knowledge than his English counterpart, Dr. Gamgee justly sees one of the causes which have given Germany the first place in many departments of science. These and similar truths he enforced with much effect before his audience, and we hope his words will be made *publici juris* beyond the scene of their first delivery.

The other provincial schools—notably Liverpool, Leeds, Sheffield, and Birmingham—have commenced the winter campaign with addresses of an unusually high order, both as regards their scientific spirit and their literary style. "Provincialism," in its secondary and unfavourable sense, is the very last epithet which we should apply to deliverances so nobly cosmopolitan. To us this scientific *Aufklärung* in the provinces is especially gratifying. We have always maintained the cause of provincial medicine, not only as one deserving of all encouragement for its own sake, but as calculated to exercise a wholesome competition on its older metropolitan rivals. No doubt the medical student in London has opportunities of observation which no other city can command, but it has more than once been questioned whether the temptations and distractions of metropolitan life are not a counterweighing disadvantage to him in his novitiate. A university, as the Master of Lincoln well puts it, should be like the poet's garden, "not wholly in the busy world, nor quite beyond it," and these conditions, favourably tested on the Cam and the Isis, are more than likely to have still further justification from the provincial medical schools.

THE MILK QUESTION.

WHILE wages and the price of all articles of consumption have been, and still are, steadily rising, it is perhaps not to be wondered at that we should be called upon to pay 25 per cent. more for our milk; and on the whole we hold it to be better that the dairyman should make his profits openly and honestly, than by those means which hitherto it is only reasonable to suppose the majority of them were wont to adopt.

Seeing that the rise in price is coincident with numerous prosecutions under the Adulteration Act, and if it be true also, as stated in the papers, that to sell pure milk at 4*d*. per quart has been, and is, a ruinous proceeding to the vendor, we must accept the conjoint action of the metropolitan dairymen as an avowal that heretofore their conduct has not been blameless.

At a meeting recently held it was proposed by one of the dairymen present that the rise of "nursery milk" should be to 6*d*. the quart, but this we are glad to say was not agreed to. We confess to having our doubts as to the exact meaning of the term "nursery milk," and we should have thought that "pure milk" was, if anything, too good for the denizens of the nursery. Stress is laid by some on the importance of always having—for the use of babies—milk from the same cow. This is a matter which is beyond the reach of analysis, and if the faithful like to pay extra for a dab of sealing-wax on the can they are of course at liberty to do so.

It appears that the contract price of milk supplied to the St. Pancras Workhouse has been 2*d*. a quart, and as the contractor is not bankrupt, it is almost unnecessary to say that the milk has been adulterated (as shown by Dr. Stevenson) with one-third part of water. The St. Pancras guardians have ordered Dr. Stevenson's report to be sent to the contractor, and we sincerely hope that, having had their eyes opened, they will continue to hold him to his contract. Boards of guardians and hospital committees must be prepared to find their milk bills enormously increased, and we hope that in their own interests, and in the interests of those committed to their charge, they will see that analyses of the milk are made at frequent intervals. The London hospitals consume milk on an enormous scale, at least a pint per bed per diem, and this means, at the advanced prices, an increase of expenditure (in the large hospitals, such as Guy's or Bartholomew's) of between £400 and £500 per annum. There are many who hold that the present rise in price is too large, and that competition will reduce it. We hope this may prove to be the case, but meanwhile dairymen may be sure that those who pay the advanced scale of charges will be ready to avail themselves of the Act against adulteration.

The whole milk question is one of the greatest importance to the community at large, and seems to us to be worthy of a thorough investigation by a Parliamentary committee. The point as to whether milk for London con-

sumption is best obtained from London itself or from the country, is already exciting discussion, and opinions on the subject are widely different. It is quite possible that well-fed and well-cared-for London cows may yield as good or better milk than country ones, and it is undeniable that the interval elapsing between milking and consumption must be shorter than when milk is brought long journeys by rail from the country. But, on the other hand, it must not be lost sight of that cow-sheds may become as great or greater nuisances than slaughter-houses, concerning which the difference of opinion is very slight. Then, again, the consumption of milk within the metropolitan district cannot be much less than, if it does not exceed, 100,000 gallons per diem, a quantity for the supply of which 50,000 or 60,000 cows would be necessary; so that it seems idle, from practical—apart from hygienic—considerations, to think of housing so many beasts within the metropolitan area. In consequence of the late misfortunes of a West-end Dairy Company, many of the competing dairymen in the same district seem to think it necessary to publish manifestoes as to the hygienic condition of their dairy farms, and we are sorry to see that in some cases these documents have been signed by the health officer of the district. Such a course on the part of the health officer is most unwise, and just now, when the Public Health Act is upon its trial, it is doubly injudicious. Rate-paying dairymen, whose servant the health officer *de facto* is, have certainly reason to complain that his private services and signature can be made available as a trade advertisement, which, if it has the effect of increasing the business of one ratepayer, must do so at the expense of another. We have had occasion before to remark that such proceedings on the part of health officers are in the highest degree anomalous, to use no stronger term. No man can serve two masters, and no health officer can be sure that he may not be called upon to take steps against the very tradesman whose window is decorated with a puff signed by himself.

THE ASHANTEE PREPARATIONS.

WHATEVER may be the opinion generally entertained as to the enormous risks to health to be encountered in the Ashantee expedition, the doctors have evidently been put upon their mettle. To their credit be it said, there is no lack of medical volunteers. Just as Sir Garnet Wolseley might very easily have had twice the number of officers on his staff that he has, so there will be no difficulty in obtaining the requisite supply of medical officers. The medical service seems to be impressed with the possible dangers to health involved in the undertaking, and no pains, we are assured, have been spared to provide everything that foresight can suggest. No spirit ration will be issued except on the requisition of the medical officers; the beverage will principally consist of cold tea, and this will form a capital occasion for utilising the compressed form of that article which can now be procured. Water for potable purposes will all be condensed or filtered before use by the troops. And this suggests to us that officers would do well to provide themselves with a small bottle of permanganate of potassium in addition to a syphon pocket-filter. They can then add a few grains of the permanganate to a doubtful specimen of water in one vessel, and afterwards insert their filter and allow the fluid to be drawn off into another. It will be of great advantage in such a climate to have a fire, however small, at night, whenever possible, both to guard against the effects of a sudden fall of temperature and the miasms rising from the soil into the surrounding atmosphere. We understand that in addition to the *Victor Emanuel*, which is being rapidly prepared for equipment as a hospital ship, it is intended to furnish ample floating hospital accommodation, so as to curtail as far as practicable the dangers arising from the location of the sick in the badly-placed hospitals on shore, and to provide means for the periodical evacuation of the stationary hospitals. We hope that every effort will be made to provide both troops and sick with fresh meat, preserved vegetables, and other supplies, and for this purpose it seems to us that some of the smaller transports or gunboats might be utilised in procuring these at different places for the use of the force. Ice, too, may now be considered of essential importance in the treatment of the sick, especially in such a climate. Above all things, it is necessary that no European soldiers should remain on the Gold Coast beyond the healthy or dry season.

ELOCUTION.

WOULD that every seat of learning gave to elocution the encouragement it receives at King's College, London, where there are two lectureships devoted to it, and each of them well attended. Professor C. J. Plumptre, in opening one of these classes, remarked on the waste of words in every-day conversation due to imperfect and semi-articulate pronunciation. Such phrases as "I beg your pardon?" "What did you say?" annoying as they are, might easily be dispensed with if distinct utterance were the rule and not, as it is, the exception. Clergyman's sore-throat would also cease to exist, and laryngeal and bronchial affections generally would be diminished, if the vocal organs received early and adequate training. The Greeks and Romans were much in advance of us as elocutionists. Contrast the divine in the pulpit with the Roman orator as he is depicted in antique gems; the square, precise, semi-animate bearing in the one case, with the easy sway of the person in the other. Reading aloud (*clara lectio*) after meals was recommended as an aid to digestion by the Roman physicians; and justly, for reading, as they practised it, meant the dilation of the chest, the full deep respiration, the rise and fall of the diaphragm, the mental exhilaration which the vocal utterance of exalted ideas implies. The dryness of the throat, the breakdown from huskiness, the undignified recourse to the water-bottle, so common on our platforms, was unknown to them. We have still some things to learn from antiquity, and the use of the voice, with its accompaniment of appropriate gesture in public speaking, is one of them.

A RECENT ELECTION.

VERY great dissatisfaction is felt by the unsuccessful candidates in connexion with the recent election of a medical officer of health for Sunderland. And, as far as we can see, the dissatisfaction is most reasonable, and the conduct of the Corporation in a high degree unjust to candidates. The port of Sunderland advertised for a medical officer of health, and deputed the Health Committee to select a few candidates, one of whom it was of course understood would be appointed. The Health Committee, having due regard to the responsibility of the appointment, were resolved to act without reference to local or personal considerations, and to select the best men who offered themselves. The committee selected five strangers, and did not include in their selection Dr. Yeld, who, however, was a local candidate. The committee showed its earnestness by printing the whole of the testimonials of the five candidates they selected. They went further, and asked the candidates to come to Sunderland to have an interview with the committee. These candidates travelled from all parts of the kingdom, in some cases hundreds of miles. They had an interview with several members of the Council, for the most part members of the Health Committee. Then at a later hour of the day

the full Council assembled, including a large number who had not seen any of the candidates, and selected Dr. Yeld, who was not included amongst the candidates selected by the Health Committee. It would be difficult to imagine conduct more unjust to the confiding and honourable men who believe in the good faith of corporations. We fear such conduct is too common in regard to appointments of this kind. There may be no redress for the candidates who have been dragged through a most costly and delusive candidature, but they will have some revenge in such exposures as we now make, and which must deter the best men from offering themselves for such appointments without an assurance that the acts of health committees are to be honoured by the bodies who assign to them the duty of judging of the merits of candidates. Next to the selected candidates the Health Committee has reason to feel stultified by the procedure on which we comment. It will, of course, be understood that we do not include Dr. Yeld himself in our censure.

RED CROSS CONFERENCE.

VIENNA, with its Exhibition so rich in war *matériel*, has been the appropriate seat of a conference for the discussion of the best mode of relieving the sick and wounded in war. We have already described the various specimens of ambulances and their appurtenances as exhibited at Vienna—the deliberations they were partly designed to illustrate remain to be noticed. Dr. Wittelshöfer opened the proceedings with an address, after which Prof. Langenbeck, of Berlin, was elected president, and Count Serurier, Lieut.-Gen. Baumgartner, Dr. Esmarch, Dr. Ricord, and Dr. Von Dumreicher, representing Russia, Schleswig-Holstein, France, and Austria respectively, vice-presidents. Reference was made to the losses the Red Cross Societies had sustained by the death of the Grand Duchess Helena of Russia, Dr. Nélaton, and others, and the business of the meeting was commenced by Professor Billroth, who spoke on the best form of stretcher to be used in war. His remarks were criticised by Drs. Ricord, Neudörfer, Demarquay, and Locati of Turin. Next day the means of transport by rail was discussed and practically illustrated in the grounds of the Exhibition. Professor Billroth in the evening entertained at dinner a party of the representatives of the various countries, the scene being Vöslau, "the Richmond of Vienna." The occasion was of the most auspicious kind, enlivened by effective speeches and all the demonstrations of good-fellowship. Professors Langenbeck, Billroth, and Virchow were among the orators, the former concluding a toast, amid much applause, with the words, "Le vieux disciple boit à la santé du jeune maître, le Dr. Ricord." Dr. Ricord, in acknowledging the compliment, said he wished he could count more pupils like Dr. Langenbeck. The guests returned as they came, in a train composed of seventeen carriages for the wounded, their journey of fifteen miles being performed at various rates of speed, with occasional shocks, to test the comfort of the vehicles.

THE TREATMENT OF SKIN DISEASES BY ELECTRICITY.

THE (New York) *Medical Record* for August 15th contains a remarkable collection of cases of obstinate skin diseases which have been treated by Messrs. Beard and Rockwell by means of central and local galvanisation and faradisation. "During the past two years," they say, "we have treated a number of cases of eczema, prurigo, and acne, by *central galvanisation* alone, without making any application to the diseased surface whatever; and under this method of treatment the results have, in some instances, been more satisfactory than under any other method of using electricity in these affections." Their method of applying the galvanism is to place the negative pole to the epigastrium and the positive to the back, moving it by turns along the whole extent of the cerebro-spinal axis, thus, as they say, "bringing the whole central nervous system under the influence of the current."

With regard to eczema they say: "At first we used localised galvanisation in eczema, with sponges, cloths, and the metallic brush, and obtained thereby great relief of the itching, and, in time, cure." Latterly, however, they have discarded the local applications, and have confined themselves almost entirely to centric galvanisation. The first case is that of an Irish servant, aged fifty-one, suffering from chronic eczema of the leg of eight years' duration, which had resisted all the ordinary remedies. Central galvanisation was first employed on April 23rd, with the immediate result of giving much relief, and on June 15th she was discharged cured. Five other cases of chronic eczema are reported, all of which were improved by the treatment, having previously resisted the more ordinary therapeutic measures. It is notable that the application was in every case followed by the immediate alleviation of the itching and burning pains which prove so tormenting in these cases. A case of acne rosacea treated by localised galvanisation is recorded, and two cases of chronic acne are mentioned which were cured, the one by local, and the other by central, galvanisation. This method of treatment has been remarkably successful in prurigo, the itching being almost instantaneously relieved. Psoriasis and pityriasis have not yielded readily to this treatment, but the pains accompanying herpes zoster have been in all cases greatly relieved. The last case recorded is one of elephantiasis of the legs, which was rapidly improved by local galvanisation, the first sign of improvement being, as usual, the disappearance of all pain.

WEST OF SCOTLAND CONVALESCENT HOMES.

AT Duncon, the Baiae of the Clyde, Miss Clugston, the Baroness Burdett Coutts of Scotland, established some four years ago several homes for convalescents, which have proved of incalculable benefit to the poorer population of Glasgow and the neighbouring towns. According to the fourth annual report read at a meeting of the directors on Monday, 92 convalescents remained in the Homes at the end of the last financial year, and since then 1179 have been admitted, comprising 587 men, 514 women, and 78 children. Of the entire number, 1056 were restored to health, 62 were greatly improved, 8 were partially benefited, 40 did not improve, 1 died, while 95 are still in the Homes. Those who are raised above the level of pauperism on the one hand, but who on the other are unable to pay for themselves, such are Miss Clugston's clients, and their appreciation of the Homes is attested by the gradual increase in the small sums contributed by them, particularly by those engaged in public works and factories. "In the disbursements," says the report, "will be observed the sum of £1464 7*s.* 3*d.* for provisions, groceries, medicines, and cordials, and as 3928 weeks' residence have been granted to the inmates throughout the year, the average weekly cost of each person for sustenance has thus been 7*s.* 5¼*d.* The directors are greatly encouraged by this, for while there has been a considerable advance in the price of all supplies, by economy and carefulness the expense per week remains the same as before." Nothing, as we have learned from an independent source, can exceed the care with which the convalescents are tended. Such food as their enfeebled frames require they have in abundance, their beds are clean and their bedrooms airy, while

recreation-grounds are laid out in elegant contrast with the bold and romantic scenery around. The Homes are, indeed, a place of pleasure-resort during the summer for the working classes, and their benefits are in consequence becoming so widely appreciated that contributions and donations are dropping in on a scale which has encouraged the directors to add thirty-five more beds. Not only is the accommodation increased, but the most improved appliances of treatment are from time to time introduced, in the shape of baths direct from the sea and apparatus for regulating the temperature of the entire institution. Well does Miss Clugston deserve the ovation she receives on all of her occasional visits to the Homes.

THE CIRCUMSTANCES OF HOSPITAL PATIENTS.

THE General Committee of the Queen's Hospital, Birmingham, in February last requested the Charity Organisation and Mendicity Society to make an inquiry into the circumstances of patients attending the hospital. This has been done. Of 88 in-patients, 67 were found legitimate objects of charity. Of 366 out-patients, 260 were found legitimate. The sub-committee to which the subject was referred have shown an intelligent appreciation of the complicated circumstances that determine the suitability of cases, but we would desiderate still more attention to the history of the ill-health of families. And we must also say that, in the account of the selected cases of imposition, the particulars given are too sparse for a judgment. For example, "Case No. 20: Single man, aged twenty-nine, wages 18s., lives at a brothel." No information of the sickness is given. We can imagine a man single, only twenty-nine years old, and even living at a brothel on 18s. a week, poor and not undeserving of relief as an out-patient. Clearly he could have very little spare cash. Of course he should live in a better place, but whether he will be allured to a better life by refusing to give him help in sickness may be gravely doubted. Perhaps only a medical man can judge of what constitutes a fit case for medical charity. At any rate the general health of a man and his family, not the mere illness from which he is now suffering, must be taken into particular account. The sub-committee say as much, indeed, in their report, and perhaps we wrong them in thinking that they have not in every case done so. The sub-committee recommend, as remedial measures against imposition—(1) the abolition of governors' tickets; and (2) the establishment of a system of examination into the circumstances of patients. The General Committee have adopted the suggestions, and propose to co-operate with other medical charities in the town in carrying them out.

MEDICAL EVIDENCE ON NUISANCES.

THE frequency with which conflicting medical testimony is now given on sanitary questions in the public courts deserves the most careful attention of all who have the honour and dignity of the profession at heart. We have this week to report another instance of one medical man being pitted against another in a court of law, not on a difficult point in medical jurisprudence or any matters involved in the maze of hypothesis. The issue in the present case is extremely simple. It is whether a particular process employed in the purposes of trade gives off an offensive effluvium. At the Thames Police-court a few days ago, the proprietor of a "Blood Baking Works" appeared in answer to a summons taken out against him by the Limehouse Board of Works, who alleged that the manufactory was a nuisance, by reason of its smell and proximity to the highway. After evidence of the nuisance caused had been given by an inspector and an assistant-surveyor, Dr. Rogers, Medical Officer of Health for Limehouse, was called. He described the process employed, and expressed his strong conviction that it was injurious to health. This opinion was strengthened by Dr. Talbot, medical officer of health for Poplar, who considered the smell from the premises offensive and obnoxious. The defendant's solicitor then called Dr. Bray, described in a local paper as "surgeon of factories under Government." Dr. Bray deposed that no nuisance whatever arose from the process. Dr. Bray was followed by Mr. Aubin, surgeon, who also contended that no nuisance existed. This witness was armed with samples of the baked blood, one of which he offered the magistrate. That functionary, however, rightly judging that a small dry specimen was utterly worthless as a test, decided to pay a visit to the manufactory himself. Whatever may be the result of the visit, we greatly deplore that medical men should contradict each other in open court on such a question as that we have just described.

DR. PURCELL AND THE ST. PANCRAS GUARDIANS.

THE St. Pancras Guardians have got no satisfaction out of their attempt to resist the order of the Local Government Board to remove the suspension of Dr. Purcell. They were relieved of the painful duty by a letter to Dr. Purcell on the 11th inst., from the central authority, removing the suspension, and requesting him to resume his duties on the 13th. The miserable way in which the guardians have acted throughout in this case entirely justifies the firm action of the Local Government Board. An attempt has been made to complicate the dispute between Dr. Purcell and the guardians by the importation into it of a controversy which ought never to have arisen between Dr. Purcell and his deputy. It is unfortunate, when a medical man is called on to resist an act of injustice at the hands of a public body, that his own hands should be weakened by a medical brother declaring a controversy with him. If Dr. Purcell's deputy had anything to complain of, he should have settled his controversy with Dr. Purcell privately, instead of writing to the Local Government Board. We shall never get our due from the public till we learn to stand shoulder to shoulder before enemies, and prefer even to "suffer wrong" rather than injure the general cause.

THE METROPOLITAN HOSPITAL FUND.

A VERY just and timely criticism on the award of the metropolitan hospital fund of 1873 appeared in *The Times* of Saturday, the 11th inst. Our contemporary takes essentially the same view of the principles that should guide the Committee of Distribution which has been taken in this journal, arguing that "the eventual success and stability of the movement can only be secured by a distribution based upon principles which are intelligible, and which commend themselves at once to the judgment and sympathy of the benevolent." *The Times* suggests that in future the Committee of Distribution should contain members who have special knowledge of the work done respectively by hospitals and dispensaries. It would be discreditable indeed to the profession if such members could not be trusted to use their special knowledge with impartiality, and they would supply materials for judgment which were certainly not supplied in any of the data before the late Committee of Distribution. We are quite convinced that, without materially lessening the amount available for the hospitals, it will be possible in the next distribution to satisfy the dispensaries, some of which do the work of a hospital in large districts of London. We do not yield to the committee in admiration of the provident principle, but, in London especially, it

cannot be pushed on too fast without offence to the charitable who supply the fund, or hardship to the poor, large numbers of whom are just keeping their heads creditably above pauperism.

DEATH FROM THE INHALATION OF ETHER.

THE first fatal case of ether inhalation since the recent reintroduction of that anæsthetic into this country occurred at the Royal South Hants Infirmary at Southampton on the 1st inst. The patient was a lad, aged fourteen, of a strumous habit, who was subjected to an operation necessitated by the presence of an opaque spot on the cornea. From the very imperfect report of the case given in a local paper, we gather that the dose required was rather large, and that just before the operation the pulse was felt to falter. The inhalation was discontinued, the pulse recovered, and the operation was performed without further inhalation. Directly after the operation the pulse and respiration ceased simultaneously. Restorative means were resorted to, and at first with some success, but in a few minutes the boy was dead. The post-mortem revealed nothing. The ether was administered by means of a cone. Dr. Lake, one of the medical officers of the infirmary, stated that "for twenty-four years chloroform had been constantly administered at the infirmary, sometimes more than once a day, and this was the first accident which had happened." The jury found a verdict in accordance with the facts, exonerating all the medical officers.

THE NORTH CAMBRIDGESHIRE COTTAGE HOSPITAL.

THE munificence of Miss Trafford-Southwell has furnished to the inhabitants of the town of Wisbech and the adjoining districts one of the most ornamental, and in many ways most complete, cottage hospitals in England. There are few towns that have, up to the present time, been worse off as to means for affording gratuitous medical relief to the poorer classes, for it did not number among the local charitable institutions even a dispensary. But when the generous foundress of the cottage hospital announced the gift, and particulars connected with the endowment, Mr. Peckover and several other leading inhabitants of the town immediately aided the work by ready and substantial support. The hospital was opened with great *éclat* on the 2nd instant. It contains sixteen beds, and there are also as separate buildings a house-surgeon's residence, laundry, porter's lodge, and mortuary. The visiting medical staff very properly form part of the managing committee, and every provision has been made for efficient and successful administration.

GRATITUDE IN A SUBSTANTIAL FORM.

A GENTLEMAN was last week seized with violent convulsions when at the University Club, in St. James's-street. Owing to the time of day, some difficulty arose in procuring the attendance of a physician. The patient was therefore conveyed to the Charing-cross Hospital, where he received every care and such attention as the nature of his fit called for. Upon his recovery he presented the charity with £100, a more substantial evidence of gratitude than we often have the pleasure to record.

NEW MEDICAL STUDENTS.

THE following may be regarded as representing tolerably accurately the number of students who have entered as first-year's men at the metropolitan medical schools this year:—St. Bartholomew's, 105; Guy's, 90; University College, 83; St. Thomas's, 55; King's College, 40; Middlesex, 38; St. George's, 37; the London, 32; St. Mary's, 21; Charing-cross, 15; and Westminster, 10.

AT a meeting of the Edinburgh University Court on Monday there was received an order of Her Majesty in Council approving an alteration made by the Court in the regulations for graduation in medicine, the effect of which is to remove a restriction on the time within which candidates for the degree of M.D. were required to pass in certain additional subjects of general education, should they not have passed in such subjects before or at the time of taking the degree of M.B. At the same meeting Dr. J. Bell Pettigrew was recognised as a lecturer on physiology whose lectures should qualify for graduation in medicine in the University.

DR. SELLERS, in his report to the Radcliffe Local Board on the pollution of the Irwell, says, amongst other things, that the stench from the river during and immediately after a flood is very bad. As high up as Bacup there is no stream, every drop of the water being appropriated during the week by the manufacturers, and on Saturday the week's accumulation of black miry liquid is discharged into the bed of what should be a river. Dr. Sellers suggests as a remedy for this state of things that all sewage-matter should be prevented from being turned into the Irwell, and that there should be further legislation to prevent manufacturers from polluting the river beyond a certain standard.

NORTH SHIELDS has lost an able and energetic practitioner in Mr. Elliot, who met his untimely death by neglecting a slight erysipelatous attack, for which he was recommended to seek rest in the country. Mr. Elliot, in his zeal as assistant sanitary inspector of the Tyne Ports, could not resist postponing his departure till he had examined an infected vessel recently arrived. His attack was, in consequence, exacerbated, and after a few days' illness, in which he received every attention from his professional friends, he died in his thirty-first year.

THE Medical and Physical Societies in connexion with St. George's, St. Mary's, St. Thomas's, and Guy's, have opened for the winter. At St. George's Mr. Edgecombe Venning was elected president, and Messrs. Brudenell Carter and Warrington Hayward vice-presidents. Mr. Kenning's prize, offered at the commencement of last session, for the best paper read before the Society by an unqualified student, was awarded to Mr. Parker—subject, "The contrasted effects of Belladonna, Opium, and Hyoscyamus."

Dr. W. T. ILIFF, medical officer of health, Newington, recommends the licensing justices to enact "that no well- or pump-water from an underground tank be used for the purpose of washing or cleansing the cans, pails, or other vessels required for the reception or transmission of milk." The magistrates have expressed their strong approval of this recommendation, which we hope will be generally adopted.

DR. W. T. STOKER, surgeon to the City of Dublin Hospital, and Mr. Thompson, house-surgeon to the Richmond Hospital, were on Thursday last appointed surgeons to the latter institution. The hospital and the gentlemen named are to be congratulated on the excellence of these appointments.

AT Dublin Dr. Cameron has delivered three of a series of twelve lectures on public health in the theatre of the Exhibition Palace. The atmosphere, ventilation, and the lighting and heating of houses were his themes, and were handled with much effect before intelligent and interested audiences.

AT Walker, near Newcastle-on-Tyne, scarlatina has increased considerably. Typhoid fever has shown itself in several streets. A case of cholera, to all appearance Asiatic, occurred on the 25th, but, though the symptoms developed with alarming rapidity, recovery took place. The sanitary arrangements of the district are in a very backward state.

A MARKED case of hydrophobia from the bite of a cat occurred in Liverpool last week. A boy of nine, five weeks after the infliction of the wound, which had been cauterised and dressed, gradually became averse to the sight or mention of water, and died in great agony from a succession of convulsive fits.

ON October 14th Mr. Legge Pearse resigned the surgeoncy to the Westminster Hospital. Mr. Richard Davy, the senior assistant-surgeon, has applied for the post, consequently a vacancy occurs in the list of assistant-surgeons. The nomination is fixed for October 28th.

DR. MUTER, analyst for the Lambeth district, in his last report states that out of twenty-nine samples of food, consisting of tea, coffee, bread, sweets, mustard, milk, and beer, which he had analysed, seventeen were found to be adulterated.

THE last report of the Leavesden and Hampstead Asylums showed that there were 1732 inmates at the former and 427 at the latter place. There had been two deaths from enteric fever at the Hampstead Asylum.

FOR the Fothergillian gold medal offered by the Medical Society for the best treatise on "The Therapeutic Means of Relieving Pain," competitors must send in their papers on or before the 1st November next.

DR. LETHEBY will read a paper to-morrow (Saturday) on the Right Use of Disinfectants, before the Society of Medical Officers of Health, in the Scottish Corporation Hall, Crane-court, Fleet-street.

MR. BRUDENELL CARTER has been memorialised by the students and medical officers of St. George's to publish the extemporised address with which he opened the session on the 1st inst.

THE stamp duty on patent medicines in the year ended the 31st of March ult. amounted to £95,812 19s. 7½d.

A TALE OF HORRORS FROM JAMAICA.

ON more than one occasion we have called attention to the circumstances connected with the medical care of the population during a severe and recent outbreak of small-pox in the parish of St. Andrews, Jamaica, and to the charges of neglect and inefficiency brought against the sanitary authority by Dr. Bowerbank. We have now before us an important report of Mr. Drake, District County Judge, and Mr. Cruise, Surgeon to H.M.S. *Aboukir*, who were appointed to examine into the matters in dispute, and it clearly substantiates the truth of Dr. Bowerbank's averments, and discloses a series of positive cruelties perpetrated upon the unfortunate persons who were attacked by the disease for the occurrence of which in any part of the civilised world we were wholly unprepared. We will analyse the report as briefly as possible, and the facts shall speak for themselves.

The reporters observe that "six charges in writing were preferred before us by Dr. Bowerbank, who appeared in person, and called numerous witnesses in support of them," other witnesses being examined on the other side.

In regard to the first charge—viz., "that the bodies of those dying of small-pox were allowed to remain unburied for an undue length of time, and that wakes or assemblages of persons were permitted to be held over the dead, by which means the disease was fostered and promoted," it was proved that such wakes did occur in four instances, at least thirty persons being present at one of these gatherings. The reporters now add that "from the well-known habits of the people, and from statements made during the inquiry, we think that there is reason to believe that wakes are, in fact, held over persons who have died of small-pox just as they would be in other cases." It is said the law, as it at present stands, cannot put a stop to these wakes, and therefore the authorities are not responsible for them; but this does not invalidate Dr. Bowerbank's assertion on the point.

In regard to the second charge, "that timely and proper measures for the isolation of patients, so as to prevent the spread of the disease, were neglected, and that the isolation when imposed was enforced injudiciously, oppressively, and cruelly," the reporters have to observe "that the authorities acted under the impression that they had a legal right to enforce isolation, although the law giving them that power had been repealed as far back as 1869"; and they add that, "there can be no doubt that considerable pressure, if not absolute compulsion, was in many instances employed to induce people to enter the tents and hospitals, or to submit to isolation in their own homes." Orders were actually issued officially from the Board of Health compelling persons to go to hospital, and "*to make their friends carry them there*," a stretch of authority for which the reporters can conceive no excuse. As regards the means taken to isolate the sick, they were, we are told, "simply ridiculous." People actually went to and from the sick without let or hindrance. Those barely recovered, practically suffering from small-pox, were allowed to frequent Kingston market and other places.

The third charge made against the authorities was "that the provision of proper and suitable appliances and other necessaries, as regards the description and selection of tents, and as regards food, clothing, bedding, and cleanliness, was neglected by those whose duty it was to see that they were provided." To this the reporters say: "The bell-tents which were provided were very ill-adapted for hospital purposes; they were too hot in the daytime, too cold at night, and very defective in ventilation. They had no flooring, and little care seems to have been taken to secure proper drainage. Dr. Cargill ultimately gave orders that no more patients should be placed under them. No provision whatever was made for latrines, or any substitute for them. The patients mostly brought their own tubs, and the ordure, with every kind of refuse and filth, was thrown into a shallow ditch within a few yards of the tents. In defiance of ordinary decency, *the patients were taken out of the tents and washed while naked in the open air, exposed to the view of the inhabitants of Townshend Town*; and, contrary to the orders of the Government medical officer, *they were washed in cold water. Some of them had to walk barefooted over the partially cleared ground to the place where they were bathed.*" There was, moreover, "a total absence of anything like proper supervision; no experienced or trustworthy nurse was employed. Of the female nurses, *one was selected because she was the mother, another because she was the sweetheart* of a patient." At night the nurses at times were not to be found, *and one delirious patient made his escape*, and was brought back by a policeman "*before his absence had been discovered by any of the nurses.*" The patients were not supplied with food at night, "medicines were administered in a very indiscriminate and careless manner, and there was a total absence of proper supervision." It is scarcely necessary to add how fully these facts speak to the truth of the particular charge to which they refer.

The fourth charge was "that the necessary medical supervision and attention were not paid to those suffering from small-pox, and necessary means to prevent its spread were neglected." In reference again to this, disclosures of a startling character are made, for we are told that "it is stated by Dr. Cargill himself that he never entered the tents of which he had charge at Halfway Tree except on one occasion. *He merely stood at the door and prescribed for the*

patients, without feeling their pulse, making any examination, or in any way coming in contact with them." He is said to have acted thus in accordance with the orders of the chief of the medical department, who, in a letter dated March 27th, remarks "I see no necessity for you to touch the patients, but you may stand at the entrance of the tent and ask questions, and so satisfy yourself as to its (*sic*) progress." Some of the allegations made in detail in support of the charge the reporters do not however consider proved. The next charge is considered to have been true—viz., "That the treatment to which the people in the tents at Halfway Tree and in the Small-pox Hospital at Stirling Castle were subjected caused general dissatisfaction, and resulted in those afflicted with small-pox refusing to enter these and other small-pox hospitals." Special causes are allowed to have operated in deterring people in some cases where it was asserted that this was due to the fear of the "neglect and cruelties," but yet in the very sentence in which this is stated the reporters repeat "that there was a strong and not unwarranted feeling against them" (hospitals).

The last charge blames the "authorities" for having failed to perform their duties properly in preventing the spread of the epidemic. The reporters "do not think it open to them to enter into any inquiry as to the course taken by the Central Board." But, in a concluding paragraph, they call attention to a very significant fact—namely, that Dr. Ross, the acting head of the Medical Department of this Board, declined to give evidence, and that there were several points which could only be satisfactorily cleared up by him. This refusal on his part has created an unfavourable impression.

No one can fail to see how completely Dr. Bowerbank has justified his statements. He deserves the thanks of the community in Jamaica for the fearless and persistent manner in which he brought forward these accusations, and finally obtained a public inquiry in regard to them. Such administration of the sanitary department of the Government as that disclosed by Mr. Drake and Mr. Cruise, in the time of a serious epidemic, is discreditable in the extreme, and indeed criminal. We beg to call the attention of Lord Kimberley to the report above referred to, and we hope he will act promptly in the matter, and so as to render the recurrence of a similar state of things impossible.

Correspondence.

"Audi alteram partem."

MEDICAL EDUCATION.

To the Editor of THE LANCET.

SIR,—The excellent remarks in your leader of October 4th on the present state of medical education demand the careful attention of everyone interested in the question. The importance of the subject induces me to add one or two observations and suggestions on two points wherein, as it appears to me, the system is in need of a radical change.

First, with regard to the range and extent of the subjects and the time within which a student has to acquire his knowledge. Four years is the period most of the examining boards deem sufficient for this purpose, and during this time the student has to attend lectures on chemistry, botany, zoology, anatomy, physiology, materia medica, surgery, medicine, medical jurisprudence, and midwifery, to study disease in the hospital wards and attend clinical lectures, to work for a given time at practical chemistry, practical physiology, practical pharmacy, practical midwifery, practical surgery, &c., and then to be examined in all these subjects. Now it is not so much of the range of subjects that I complain as of the *extensive* acquaintance with each that is *expected* from the candidate after his four years' study. A lifetime hardly suffices for the study of some of these subjects; and yet there are examiners and lecturers who, as their special knowledge increases, seem to acquire morbid notions as to the importance of their own department, and insist on an intimate acquaintance with it, all others being regarded as secondary; forgetting that the students they have to deal with want to be medical practitioners having a competent and sound scientific knowledge, but not simply and solely anatomists, physiologists, or chemists. I would be the last person to decry the value of a thorough scientific training for the medical practitioner; I appreciate its value fully; but what I maintain is, that an intimate acquaintance with all the above subjects cannot be acquired in four years—the prescribed period,—which is, moreover, all the time that can be afforded by the vast majority of those desirous of entering the profession. The process has not yet been discovered of driving into a British skull, in so short a period, the knowledge of half a dozen German professors. The attempt is impossible; and whilst striving after the impossible we lose what is possible. The student's mind, under the present system, is crammed with ill-digested facts and crude notions about the most recent theories. These he disgorges at some examination board, famed, perhaps, for high-standard questions and indifferent answers; he receives his certificate, and is qualified (?) to practise his profession; but when he comes to the real work he is surprised to find how little his knowledge serves him. His studies must begin afresh, and he must find out for himself which is useful and which is superfluous information.

What is the remedy for this? Lengthen the period of study, or diminish the number of subjects? Do neither, but limit the *range of each subject*. Let some competent body (and who so well fitted for the task as the General Council of Medical Education?) from time to time draw up and publish schedules defining the range of the examination in each separate subject; let all that is superfluous be left out, retain that which is essential and important, and which can be mastered thoroughly by the pupil in the time; let the questions be kept strictly within this range, and then the examinations may be as stringent and rigorous as you please. In this way it would be ensured that every student is thoroughly grounded in the essentials of his profession; that so far as his knowledge goes it is sound. He is thus prepared in the leisure of his earlier years of professional life to extend his scientific knowledge, because he has a firm basis to go upon, and English medical practitioners would then do far more for the advancement of physiology and the other sciences connected with medicine than at present. Now, unfortunately, there are many who, after passing their examinations, find they have gone over the entire range of their several subjects so superficially that the little vague knowledge they possessed soon evaporates; they have become unfitted to study anything thoroughly; they are weary of science; and gradually settling down to what is called "routine" practice, they may possibly gain experience, but only at the expense of the lives of their patients.

My remarks, of course, apply only to "pass" examinations. By all means let there be "honour" examinations in addition. These might advantageously take place at a later period, and be as extensive and varied as possible. Thus the abler men—those who were specially fitted to advance the various departments of scientific medicine—would be found out and encouraged; whilst the great body of practitioners, from their sounder training, would be better able to appreciate and utilise any discoveries that were made. What we want still was put very concisely nearly forty years ago by my venerable and distinguished namesake in his lectures: "A well-weighed scheme of professional education, sound and practicable,—comprehensive, yet moderate in its requirements, and adapted to all." And he goes on to say: "Besides the many good purposes this would serve, it would have the special benefit of satisfying the minds of students themselves that at each step in their progress they are in the right path." The General Council of Medical Education has been occupied for years trying to reconcile the conflicting interests of nineteen licensing and examining bodies, and to induce them to have one examining board for all. If, whilst these conflicting interests are being adjusted, the Council would promulgate a schedule limiting the range of each subject after the manner I have suggested, it would be received as an immense boon by students; it would extinguish cramming, and do much to advance both practical and scientific medicine.

Secondly, the system of requiring "certificates of *attendance* on lectures" has somewhat of a mediæval character, and appears to be unwise. I fear such a regulation rather encourages the notion in the minds of some students that by being listless listeners to the lecturers they will imbibe

without any effort all the knowledge that is necessary. "It is desirable," as you remark in your admirable article, "that before a student presents himself for public examination he should possess certificates from his teachers of having gained sufficient knowledge to justify his attempts." And why should not this be required? Such a regulation would revolutionise medical teaching, and would secure what you so much desiderate — the improvement of the teachers themselves. It would stimulate the communicative powers of the lecturers, and by holding frequent *viva voce* and written examinations on the subjects discussed in their lectures they would find out where their teaching had been defective or misunderstood, and be able to remedy it. Moreover, by requiring certificates of the proficiency of the taught, instead of the present certificates, the teachers would be put more distinctly on their trial. A certain amount of discredit would be reflected upon them by their pupils' failure. For if a pupil were rejected by the licensing body, this would imply, not only that he had been insufficiently instructed, but that his instructor, in giving him a certificate of proficiency, was unable or had failed to find out his deficiencies.

It is absolutely necessary, however, before teachers will be willing to adopt such a plan, that the vagaries of examiners must be controlled; and, whilst the questions set in the pass examinations ought to be sufficiently searching and comprehensive, they should at the same time be strictly confined within the range authorised by such a schedule as I have above referred to.

I am, Sir, yours, &c.,

Cambridge, Oct. 10th, 1873. P. W. LATHAM.

BLOODLESS OPERATIONS.

To the Editor of THE LANCET.

SIR,—I must claim for an English surgeon and for British surgery some share at least in whatever merit there may be in the employment and the recommendation of that method of saving blood in amputations with which Professor Esmarch's name is now coupled. The surgeon is Mr. Clover. The amputation in which he employed a method in all respects almost exactly similar to that which is now advocated was performed twenty-one years ago, in June, 1852. I was present at, and assisted him in, its performance.

The case is as follows:—Mr. B——, fifty years of age, had been struck twenty years previously by a cricket-ball on the lower part of the thigh. Abscess followed, and sinuses formed which never healed. In March, 1852, Mr. Clover trephined the lower end of the femur, and removed some sequestrum. Erysipelas and deep suppuration followed. Increasing exhaustion setting in and a considerable portion of femur being found to be necrosed, amputation was proposed, and, after consultation, agreed upon.

On June 9th, 1852, the patient was put under chloroform, and as he was very weak it was thought of much importance to save as much blood as possible. Mr. Clover accordingly adopted the following method to effect this:—The limb was raised, and a narrow bandage was applied very tightly from the toes nearly to the perineum; a screw tourniquet, without any compress, was then applied immediately above the bandage. The bandage was then unrolled from the thigh, and the limb removed by antero-posterior flaps, the bone being divided about two inches below the trochanter minor. Scarcely any blood was lost, and the patient made a rapid recovery.

The recommendation to which I allude is contained in the three last editions of the "Science and Art of Surgery." It is as follows:—"In those cases, as of chronic disease, in which it is of great importance to save blood as much as possible to the patient, it is a good precaution to bandage the limb tightly from below upwards immediately before the tourniquet is applied, thus preventing to a great extent the venous congestion." (Ed. of 1864, p. 19.)

It will be seen that the method adopted by Mr. Clover in 1852 is identical in principle with that employed by Esmarch, and only differs in one point of detail—viz., the use of a tourniquet band instead of an india-rubber tube as the means of arresting the entry of blood into the bandaged limb. Of the two I should consider the web band of a screw tourniquet far safer than india-rubber. The latter is a very uncertain material, and, after having been laid aside for some time, is apt to become hard and brittle, so that there might be danger of its snapping when much stretched. The webbing of a tourniquet band is quite safe, can neither yield nor snap.

In conclusion, I may say that the simple raising of a limb in the perpendicular position for a few minutes before the application of the tourniquet is quite sufficient to empty it of blood, more particularly if friction or gentle pressure from below upwards is combined with position, and that tight bandaging is quite unnecessary. This simple process is, I understand, much employed in Edinburgh, and was used with perfect success at University College Hospital on Wednesday last by Mr. Berkeley Hill in an amputation through the lower third of the leg.

Esmarch's real merit appears to me to consist in having applied this method to other operations on the limbs than amputations.

I am, Sir, yours, &c.,

Oct. 11th, 1873. JOHN ERIC ERICHSEN.

To the Editor of THE LANCET.

SIR,—In to-day's issue of your valuable journal, p. 532, you mention several probable dangers which may accrue after operations performed according to the plan introduced by Esmarch; but there is one great change in the circulation produced by it which struck me as being important to consider as to its advantages and safety. Before the operation is performed the amount of blood is, or may be supposed to be, adequate to all the exigencies of the entire system, and that the heart and general vascular system contained as much blood as may be safe for them to bear.

When, however, an elastic ligature of great power is applied to a limb, and progressively tightened from below upwards, its object and effect must be to empty the vessels, thereby forcing the blood into a considerably diminished vascular area, and so creating a sudden relative surcharge, which may not be safely endured. I have ventured to make this suggestion, the fallacy or the truth of which can only be proved by facts.

I am, Sir, yours &c.,

Manchester, Oct. 11th, 1873. THOMAS RADFORD, M.D.

CEPHALOTRIPSY.

To the Editor of THE LANCET.

SIR,—In your issue of October 4th, Dr. Radford, of Manchester, took exception to a remark of Dr. Carey's in an account of a case of cephalotripsy, in which the latter says "he thought of Dr. J. Braxton Hicks's plan of removing the calvaria and canting the base." Dr. Radford said "it was not Dr. Braxton Hicks's plan, but many years ago was described and practised by the late Dr. Hull." Lest any of your readers should think I had claimed the credit of others' work, I write to say that I have nowhere made any such claim. In the paper read before the Obstetrical Society (see Obst. Soc. Lond. Trans., vol. iv.), entitled "An Inquiry into the best mode of Delivering the Fœtal Head after Perforation," I most distinctly referred to Dr. Hull as having pointed this out. I remarked that it was curious that, with the exception of Burns, the succeeding authors were silent upon the point; yet so it was. I had written my paper in rough, when, searching through Burns, I found his allusions to Hull and his repetition of the experiments confirming him. After him the principles which regulate traction after perforation were lost sight of, and in difficult cases force rather than skill was triumphant. Since the reading of my paper many authors have expressed their sense of the value of the principles involved; and as the oftentimes formidable operation of craniotomy and cephalotripsy ought not to be undertaken without a clear comprehension of the principle, I shall be amply rewarded if my paper discussing the whole subject have been instrumental in advancing our knowledge. Yours truly,

J. BRAXTON HICKS.

George-street, Hanover-square, October 10th, 1873.

HOSPITAL SUNDAY FUND AND DISPENSARIES.

To the Editor of THE LANCET.

SIR,—I was gratified to find by your article in the last number of THE LANCET, on the "Report of the Committee of Distribution of the Hospital Sunday Fund," that you do not entirely agree with their remarks on non-provident dispensaries; and I shall be obliged if you will allow me to say a few words on the subject; for if the statements in the report are not contradicted, they might prejudice the public against one of the most valuable kinds of charity, and impair its usefulness.

The report admits the necessity for hospitals being of a purely gratuitous character, but the arguments advanced apply with equal force to dispensaries. There is, moreover, a special advantage in the latter—viz., that the patients can be visited at their own homes. One of the popular cries against non-provident dispensaries is, that sometimes patients obtain gratuitous relief who can afford to pay for advice and medicine. Does not the same objection apply to hospitals? And are charities to be abandoned because they may be abused? As regards the dispensary to which I am attached, I can safely affirm that the poor creatures who apply for relief are among the most destitute classes in London, from whom it would be cruelty to extort the very smallest payment, and the physicians and surgeons give their services gratuitously. Dispensaries have been the means of saving many respectable families from the degradation of applying for parochial relief, or the ruin which sickness so often entails on the labouring poor, by enabling them to tide over seasons of great trial.

I am, Sir, your obedient servant,

J. M. WINN,

Senior Physician to St. George's and St. James's Dispensary.

Harley-street, Oct. 13th, 1873.

OWENS COLLEGE, MANCHESTER.

To the Editor of THE LANCET.

SIR,—On the occasion of the opening of the new buildings of Owens College, Sir James Kay-Shuttleworth, Bart., referred "to the establishment in the College of the first laboratory in England for physiological research." Although I regretted exceedingly the error into which the speaker had fallen, and wished to have it in my power to correct it, I felt that, on an occasion of so formal a character, when no speeches were made except by those called upon for the purpose by the President of the College, the Duke of Devonshire, it would have been scarcely becoming had I, unasked, risen to vindicate the honour of the physiological laboratories of Edinburgh, Cambridge, and London.

To the part which these laboratories have taken in what I may call the revival of the study of experimental physiology in England I hope to direct very marked attention in the introductory address to my class of Practical Physiology, which I shall deliver in the College on Thursday, the 23rd inst.

I am led to address you this letter to explain what has, I fear, been considered by some friends unaccountable negligence in failing to correct a statement prejudicial to British physiology.

I remain, Sir, your obedient servant,

October 14th, 1873. ARTHUR GAMGEE.

"STRYCHNINE-POISONING."

To the Editor of THE LANCET.

SIR,—In the case of death from strychnine-poisoning reported in your issue of last week, it is assumed that death resulted from the imbibition of one-eighth of a grain in two doses which were prescribed medicinally. I have for months past had under my care patients suffering from amaurosis each of whom has had one-twelfth of a grain injected subcutaneously twice daily, and I have never seen any ill effects result from this dose. As the effect of remedies administered subcutaneously is more certain (and generally greater) than when taken internally, I think it is fair to conclude, as you do, that the patient must have made a mistake in the dose, and taken a much larger quantity than was prescribed. I may mention that the effect of this remedy, administered hypodermically, in some cases of amaurosis is sometimes marvellous, in proof of which I hope shortly, with your permission, to publish a series of cases in your columns.

I am, Sir, your obedient servant,

CHARLES BELL TAYLOR, M.D.,

Surgeon to the Nottingham and Midland Eye Infirmary.

October, 1873.

DR. RUTHERFORD AND THE NEWSPAPERS.

To the Editor of THE LANCET.

SIR,—I think it is due to my college, to my colleagues, and to myself that I should inform my professional brethren that I am absolutely ignorant of the authorship of a "puff" regarding my freezing microtome, which appeared in the *Globe* newspaper on Thursday last. I suspect that the paragraph in question emanated from someone interested in the *sale* of the instrument. I can only say that I wish its author had spared me the annoyance which his puffing has caused me. It is too bad that booksellers and instrument-makers should, in order to profit by us, drag us into the newspapers and subject us to the horrid humiliation of being "puffed."

I remain, Sir, yours faithfully,

King's College, October 13th, 1873. W. RUTHERFORD.

Obituary.

DR. JOHN MURRAY.

IT is with very great regret—regret which will be shared by a large section of our metropolitan readers—that we have to announce the sudden death of Dr. John Murray, which occurred on Wednesday morning last, the 15th inst., at his residence in Harley-street. Dr. Murray, since his return from his holiday at the beginning of August, had been attending very closely—too closely, perhaps—to his duties, both professional and literary, and on the 8th inst., while dining with a relative, he complained of feeling somewhat depressed and poorly. On Thursday, the 9th, and on the following day, however, he was feeling well enough to attend to his duties in connexion with the Middlesex Hospital and School, and it was not till last Saturday morning that he found himself obliged to give up work, in consequence of what was apparently a sharp attack of tonsillitis. The tonsillitis was accompanied by difficulty in swallowing and slight dyspnœa, and as these symptoms increased rather than diminished during the day, Dr. King, one of his colleagues at the hospital, deemed it advisable to sit up on Saturday night. On Sunday he was better again, and it was hoped that the attack might pass off, but on Monday morning the dyspnœa returned, and by ten o'clock had become so harassing that he sent for Dr. Morell Mackenzie. Dr. Mackenzie, on examining the throat and larynx, pronounced him to be suffering from acute laryngitis with marked œdema of the epiglottis. Deeming it necessary to scarify the epiglottis, Dr. Mackenzie returned to his house, which is in the adjoining street, for a laryngeal lancet. Dr. Mackenzie fortunately put some tracheotomy instruments into his pocket as well, and returned at once to Dr. Murray's house, where he arrived in time to learn that in his absence he had been seized with a violent spasm of the glottis, and he found him in his arm-chair, livid, breathless, and apparently dead. Tracheotomy was at once performed, and after artificial respiration had been unremittingly performed for twenty minutes, Dr. King and Dr. Mackenzie had the satisfaction of seeing natural respiration return and their patient gradually revive. During Monday and the greater part of Tuesday Dr. Murray was apparently making satisfactory progress, and no symptoms occurred to cause further alarm till Tuesday night, when the respiration became again impaired, and it was found that the lungs were intensely congested, and that the urine was loaded with albumen. From that time Dr. Murray never rallied, and died on Wednesday morning,

at about half-past ten. At first it was thought that the case was one of simple laryngitis, but the subsequent congestion of the lungs and the intense albuminuria render it improbable that this was the case, and there can be little doubt that Dr. Murray has succumbed to some form of blood-poisoning, whether diphtheritic or not we are unable to say.

Dr. Murray was born in the year 1843, at Aberdeen, and was the son of an advocate resident in that city. He received his early education at the Gymnasium, and in 1859 matriculated at the university, where for a couple of years he attended the classes in the faculty of arts. He subsequently attended the classes in the faculty of medicine, and in 1865 terminated his course of study there by taking the degrees of M.B. and C.M. In the same year he became a Member of the College of Surgeons of England, and on leaving Aberdeen studied for a short time at Edinburgh, and subsequently came to London, where he entered as a student at the Middlesex Hospital. In 1867 he took his doctor's degree, and afterwards spent a short time at the medical schools of Paris, Vienna, and Berlin. On his return home he became Medical Registrar and Pathologist to the Middlesex Hospital, and, in conjunction with Mr. Arnott, produced those excellent reports which have served as models for several similar documents which have been compiled elsewhere. In 1871 he was elected assistant-physician to the Hospital for Sick Children in Great Ormond-street, and in the following year was elected to a similar office at the Middlesex Hospital. He also held the appointment of part lecturer on Pathology at the Middlesex Hospital, and latterly filled the office of dean to the school.

Dr. Murray took great interest in all matters connected with the Volunteer Medical Service, and was himself surgeon to the London Scottish, and honorary secretary to the Volunteer Medical Association. He was a prominent member of the British Medical Association, and many of the visitors who came to London during the late meeting will learn with regret that the obliging secretary of the Medicine section, and the general organiser of the Brighton excursion, is no more. For some time past he was sub-editor of the *British Medical Journal*, and had under his particular charge the Reports on Medical and Surgical Practice.

It is needless for us to speak of Dr. Murray's many excellent qualities. The catalogue of his appointments which we have given is unusually long, and so speaks, in a way which is not open to question, of the manner in which he was esteemed by the large number of professional brethren with whom he was constantly thrown in contact. Dr. Murray was a highly educated, enthusiastic physician, and the unusual success which he had already achieved gave great earnest of a brilliant future. His sudden death will be regarded as a real and sorrowful calamity, and we may say truly and soberly that there is hardly a man in London of the same standing whose death would be as widely felt and as universally regretted. In his literary capacity we were often thrown in contact with him, and we can say that we never knew his urbanity to flag, nor found him unwilling to perform all manner of good offices. His genial, social qualities endeared him in a peculiar way to professional friends of his own age, who will cherish pleasing reminiscences of the gatherings with which he was especially identified.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 9th :—

Kane, Patrick, Sawley, near Derby.
Matthews, Arthur, Harwich.
Young, George William, Mile-end-road.

The following gentleman also on the same day passed his Primary Professional Examination :—

Treves, Frederick, London Hospital.

IT is decided to establish a branch dispensary at Pendleton in connexion with the Salford and Pendleton Royal Hospital and Dispensary. A suitable site of ground has been generously given to the committee by Mr. W. Agnew, of Pendleton, and no time will be lost in arranging preliminary measures for the erection of the dispensary.

LAST year there were 179 petitions presented in lunacy.

AT the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on the 14th inst., Sir Edward Hilditch, Inspector-General, in the chair, the sum of £86 was distributed among the various claimants.

MISHAP WITH CARBOLIC ACID.—On Tuesday last a boy aged two years drank from a bottle containing a preparation of carbolic acid, some of which the father was in the act of applying to a tooth that pained him. Seven hours after the accident the child was taken to the Charing-cross Hospital, when he was found to be suffering with all the symptoms of acute laryngitis. These became so urgent that on the following day tracheotomy became necessary. Up to the time of going to press the case was reported to be doing fairly well.

DONATIONS &c. TO MEDICAL CHARITIES.—University College Hospital has received a third £1000 from "G. W. S." The Hospital for Diseases of the Throat has received £1000 from "H. D. T." Mr. Thomas Buck bequeathed £500 to the Infirmary and Dispensary, £500 to the Fever Hospital, and £250 to the Eye and Ear Infirmary, all at Bradford. Mr. Joseph Chamberlain has given £200 to the Hospital for Women, Birmingham. Mr. G. Ashley Dodd has presented fifty brace of partridges for the use of the patients of the Middlesex Hospital.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The first meeting of the eighteenth session of the above Society was held on October 3rd, at the Royal Kent Dispensary, Greenwich-road; Dr. Ralph Gooding, president, in the chair. The following gentlemen were elected office-bearers for the ensuing session 1873-4:—President: F. Moon, M.B. Vice-presidents: Dr. John Anderson and Dr. J. Prior Purvis. Council: Mr. John M. Burton, Dr. Carr, Mr. Lockhart, Dr. Walker, Mr. C. Hind, Dr. Ralph Golding, and Dr. J. H. Miller. Treasurer: Dr. Prior Purvis. Secretary: Mr. H. K. Hitchcock. Librarian: Mr. J. B. Saundry. Dr. Moon then took the chair as president, and proceeded to deliver an inaugural address. The next meeting will be held on Friday, November 7th, at the Royal Kent Dispensary, Greenwich-road, at 8 P.M. precisely. Mr. W. F. Teevan will read a paper on "Retention of Urine: its Causes and Treatment."

THE PUBLIC HEALTH ACT, 1872.

[In the following list the letters "P.S.D." signify Port Sanitary District, "R.S.D." Rural Sanitary District, and "U.S.D." Urban Sanitary District.]

Districts, and Medical Officers.	*Salary per ann.*	*Area in Acres.*	*Population.*
Austonley: Cartworth, Fulstone, Hepworth, Holme, Honley, Netherthong, Scholes, Upperthong, Wooldale, U.S.D.s.—Mr. William Berry...	£100	19736	21217
Battle, U.S.D.—Mr. Edward Smith	£15	8210	3490
Blandford, R.S.D.—viz.:			
Division No. 1—Mr. Charles Ingram	£19	17448	3085
" No. 2—Mr. Edward M. Spooner ...	£21	17730	2775
" No. 3—Dr. Thomas Fielding	£21 8s.	14464	3181
" No. 4—Mr. Francis D. Lys	£10	8323	1554
Blyth, U.S.D.—Dr. Henry D. Ward	£30	100	1800
Boston, P.S.D.—Mr. Walter Clegg	£120		
Brigg, R.S.D.—Mr. James B. Moxon	£120	144000	26000
Cartworth, U.S.D. — combined with Austonley U.S.D. and others.			
Cheltenham, U.S.D.—Dr. Thomas Wright	£300	4200	42000
Chippenham, R.S.D.—viz.:			
Pewsham Division.—Dr. Thos. Kitchener ...	£17	3568	1679
Chippenham " Mr. Francis Spencer ...	£19	6620	1496
Corsham " Mr. William Kemm ...	£23	12706	4618
Lacock " Mr. James H. Crisp ...	£12	3691	1499
Castle Combe " Mr. Algernon Sudlow...	£17	13564	3286
Box " Mr. Thos. F. Snow ...	£9	4486	2161
Sutton Benger " Mr. Edward M. Little...	£19	11571	3190
Cleator Moor, U.S.D.—Dr. John Eston	£50	992	6000
Colchester, P.S.D.—Mr. George T. Parker	Fees.		
Cowes, P.S.D. } Dr. William Hoffmeister	Not fixed.		
Cowes, U.S.D. }			
Dartmouth, P.S.D.—Mr. John M. Puddicombe...	£3		
Deal, P.S.D.—Dr. Thomas E. Mason	£10, and fees accor. to services.		

Districts, and Medical Officers.		*Salary per ann.*	*Area in Acres.*	*Population.*
Deal, U.S.D.—Dr. Thomas E. Mason		£30	1167	8004
Devizes, U.S.D.—Dr. Edward N. Garless		£36 15s.	917	6839
Dover, P.S.D.—Dr. M. K. Robinson		£182		
Driffield, R.S.D.—Mr. Alfred Scotchburn		£75	110280	19265
Exeter and Exmouth, P.S.D.—Mr. W. J. Land...		*		
Fairfield, U.S.D.—combined with Chapel-en-le-Frith, R.S.D. and others.				
Faversham, P.S.D.—Mr. William N. Spong ...		£15		
Folkstone, U.S.D. — combined with Austonley U.S.D. and others.				
Gainsborough, P.S.D.—Dr. Draper Mackinder ...		†		
Glossop, R.S.D. } Glossop, U.S.D. } combined with Chapel-en-le-Frith R.S.D. and others.				
Golcar, Linthwaite, Longwood, Marsden-in-Almondbury, Marsden-in-Huddersfield, Scammonden, Slaithwaite,	U.S.Ds	Mr. Joseph Heslegrave	£98	16462	21530
Guilteross, R.S.D.—Mr. Haynes E. Hardwicke ...		£50	43500	11147
Hartlepool, U.S.D.—Dr. George Green		£15	137	14000
Haslingden, R.S.D.—Dr. Jonathan A. Harrison...		£250	22286	45856
Hastings, U.S.D.—Mr. Charles Ashenden		£200	1800	30000
Hayfield, R.S.D.—combined with Chapel-en-le-Frith R.S.D. and others.				
Hepworth, U.S.D. — combined with Austonley U.S.D. and others.				
Hereford, R.S.D. — combined with Bromyard R.S.D. and others.				
Holme, U.S.D.—combined with Austonley U.S.D. and others.				
Honley, U.S.D.—combined with Austonley U.S.D. and others.				
Ledbury, R.S.D. — combined with Bromyard R.S.D. and others.				
Leominster, R.S.D. — combined with Bromyard R.S.D. and others.				
Linthwaite, U.S.D.—combined with Golcar U.S.D. and others.				
Longwood, U.S.D.—combined with Golcar U.S.D. and others.				
Marsden-in-Almondbury, U.S.D. } Marsden-in-Huddersfield, U.S.D. }		combined with Golcar U.S.D. and others.			
Martley, R.S.D.—Mr. Alexander W. Blyth		£100	53802	16292
Merthyr Tydfil, U.S.D.—Mr. Thomas J. Dyke ...		£250	17714	48000
Milford Haven, P.S.D.—Mr. David P. Sacr... ...		Fees.		
Netherthong, U.S.D.—combined with Austonley U.S.D. and others.				
Newbold & Dunston, U.S.D.—Dr. A. Mackintosh		£36	2936	4500
Newport, Mon., P.S.D.—Dr. Benjamin Davies ...		Not fixed.		
Newtown & Llanllwchaiarn, U.S.D.		Mr. G. C. Smith...	£20	201	5000
Padstow, P.S.D.—Mr. William Moorman		£5		
Pewsey, R.S.D.—viz.:					
Division No. 1—Mr. C. H. Carter		£10	16736	4177
„ No. 2—Mr. S. B. C. Barrett		£6	6561	1471
„ No. 3—Dr. G. F. Fulcher		£10	13994	2872
„ No. 4—Mr. C. H. Lawrence		£10	24880	3399
Poole, P.S.D.—Mr. Heber D. Ellis		†		
Portsmouth, P.S.D.—Mr. George Turner		†		
Rochester, P.S.D.—Dr. J. Sladen Knight		Not fixed.		
Rotherham, R.S.D.—viz.:					
Rotherham Division.—Mr. Wm. J. Le Tall ...		£100	26765	9985
Kimberworth „ Mr. Alex. R. Cobban...		£100	13514	9741
Rotherham, U.S.D.—Dr. Junius Hardwicke ...		£100	5080	26794
Scammonden, U.S.D. — combined with Golcar U.S.D. and others.				
Scholes, U.S.D.—combined with Austonley U.S.D. and others.				
Settle, Skipton, } R.S.Ds Skipton, U.S.D. }		Dr. E. West Symes ...	£400	309021	47533
Shoreham, P.S.D.—Mr. Charles M. Kempe ...		£50		
Slaithwaite, U.S.D. — combined with Golcar U.S.D. and others.				
Sunderland, P.S.D. } Sunderland, U.S.D. }		Dr. Henry John Yeld ...	£300	2078	100000
Tavistock, R.S.D.—viz.:					
Beerferris Division.—		Mr. Newbigin Kent	25 per cent. per ann. on salaries as Poor-law Union medical officers.	155036	31201
Buckland „		Mr. Richard Willis			
Whitchurch „		Mr. John Pearse ...			
Calstock „		Mr. Henry T. Woodd			
Lewtrenchard „		Mr. John G. Doidge			
Milton Abbot „		Mr. Wm. C. Northey			
Tavistock „		Mr. Richard Sleman			
Teignmouth, P.S.D.—Dr. Wm. C. Lake ...		Fees acc. to services.			
Thingoe, R.S.D.—Mr. F. E. Aldrich		£100	85130	17614
Truro, U.S.D.—Mr. Henry Andrew		£50	1108	10899
Upperthong, U.S.D.—combined with Austonley U.S.D. and others.				
Weobley, R.S.D. — combined with Bromyard R.S.D. and others.				
Wayland, R.S.D.—Mr. Charles B. Wiles		£50	42935	11004
Whitehaven, P.S.D.—Mr. Robert Lumb		†		
Whittington, U.S.D.—Dr. Angus Mackintosh ...		£28	5578	1573
Woodsic, U.S.D. — combined with Austonley U.S.D. and others.				
Yeovil, U.S.D.—Dr. Edward C. Gardand		£30	2009	8426

* 21*s.* for each vessel inspected, and fees.
† Included in salary as medical officer of health for U.S.D.

Medical Appointments.

BARNES, W. L., M.R.C.S.E., has been appointed Assistant-Surgeon to the Millbank Prison, vice Nicolson, promoted as Medical Officer to the Portsmouth Convict Prison.

BERNARD, D. E., L.R.C.P.Ed., M.R.C.S.E., has been appointed Assistant-Surgeon to the Royal Infirmary, Bristol, vice Dowson.

BOASE, F., M.R.C.S.E., has been appointed Medical Officer of Health for the Penrhose Port Sanitary District.

DAVIES, J. H., M.R.C.S.E., has been appointed Medical Officer to the Margam Copper Works and Collieries, Talbach, vice Phillips, resigned.

DEAN, W., L.R.C.S.E., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Golcar, vice Roberts, deceased.

DONOVAN, J. I., M.D., has been appointed House-Surgeon at the North Dispensary, Liverpool, vice Warburton.

DOUGLAS, J. G. D., M.B., has been appointed an Hon. Surgeon to the General Dispensary, Bournemouth.

DOWSON, C. H., L.R.C.P.Ed., M.R.C.S.E., has been appointed a Surgeon to the Royal Infirmary, Bristol, vice Clark, resigned.

ELLIOTT, J. R., M.R.C.S.E., has been appointed Surgeon-Superintendent of the Jorehaut Tea Company's Plantations, Assam, India.

GRAY, J. H., M.B., M.R.C.S.E., has been appointed House-Surgeon to the Hospital for Sick Children, Bristol, vice Dr. Eliza L. Walker, resigned.

HEARNE, Dr., has been appointed Medical Officer to the new Calabar Station of the African Association of Liverpool.

HUMPHREYS, Mr. H., has been appointed Obstetric Assistant at the Middlesex Hospital.

JOHNSON, R. L., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed a Physician to the North London Consumption Hospital, vice James, resigned.

MACCALL, T., M.B., C.M., L.M., has been appointed Assistant to the Extra Physicians of the Royal Hospital for Sick Children, Edinburgh, vice Dr. Renton, resigned.

M'CANN, T. A. A., M.B., has been appointed Resident Medical Officer at the East London Hospital for Children and Dispensary for Women, vice Magrath.

MACKEY, E., M.B., L.R.C.P.Ed., has been appointed a Physician to the Queen's Hospital, Birmingham.

NADIN, Dr., has been appointed Medical Officer and Lecturer on Chemistry to Trinity College, Glenalmond, Perth.

PLANT, W. H., L.R.C.P., has been appointed an Honorary Surgeon to the Kilburn, Maida-vale, and St. John's-wood General Dispensary.

PRITCHARD, R. C., L.F.P. & S.Glas., L.M., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the No. 4 District of the Saffron Walden Union, vice H. J. Buck, L.R.C.P.Ed., resigned.

PURDON, H. D., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballyborgan Dispensary District of the Edenderry Union, vice Edwards, resigned.

RADLEY, W. H., M.R.C.S.E., has been appointed Medical Officer for the Workhouse and the Boston District of the Boston Union, vice Coupland, resigned.

ROBINSON, Mr. J. (Oxford University Museum), has been appointed Joint Public Analyst for Berkshire, vice Pode, deceased.

RODWELL, T. H. B., M.R.C.S.E., has been appointed Medical Officer for the Workhouse and District No. 2 of the Loddon and Clavering Union.

SINCLAIR, W. J., M.B., C.M., has been appointed House-Surgeon to the Clinical Hospital and Dispensary for Children, Manchester, vice Tytler.

SMITH, Mr. H. H., has been appointed House-Surgeon at the Middlesex Hospital.

STANMORE, Dr., has been appointed Medical Officer to the Brass Station of the African Association of Liverpool.

TOMES, Mr. A., has been appointed Junior House-Surgeon at the Middlesex Hospital.

WARBURTON, E. S., M.R.C.S.E., has been appointed House-Surgeon at the South Dispensary, Liverpool, vice Morris, resigned.

WHATELY, Mr. G. F., has been appointed a Physicians' Assistant at the Middlesex Hospital.

Births, Marriages, and Deaths.

BIRTHS.

BENNETT.—On the 15th inst., at Worksop, Notts, the wife of E. Bennett, M.R.C.S.E., of a son.

BIRCH.—On the 8th inst., at Beaumont-street, Portland-place, the wife of E. A. Birch, F.R.C.S.I., of a son.

CAMPBELL.—On the 9th inst., at Wellesley-terrace, Liverpool, the wife of W. Maodie Campbell, M.D., of a daughter.

SMITH.—On the 11th inst., at St. Hilda's Cottage, Lofthouse, Saltburn-by-Sea, the wife of James Broom Smith, L.R.C.P.E., &c., of a son.

SMITH.—On the 11th inst., at Lion House, Hemerton, the wife of R. Harman Smith, B.A., M.R.C.S.E., of a daughter.

MARRIAGES.

BARTHOLOMEW—RYE.—On the 22nd ult., at the Anglican Collegiate Church of St. Paul, Charles Eugene, eldest son of Eugene G. Bartholomew, Esq., of Catheart-hill, Upper Holloway, to Edith Annie, third daughter of Arthur Brisley Rye, F.R.C.S., of the Grotto, Leckhampton, near Cheltenham.

WHITEHOUSE—M'ALPIN.—On the 30th ult., at Stratford, Thomas G. Whitehouse, M.D., to Elizabeth, widow of D. M'Alpin, Esq.

DEATHS.

BORRETT.—On the 10th inst., James Borrett, M.D., of Clifton.

GORDON.—On the 28th ult., Adam Gordon, M.R.C.S.E., of South Ronaldshay, Orkney.

HOWITT.—On the 7th inst., Wm. Howitt, F.R.C.S.E., of Fishergate-hill, Preston, aged 63.

NICHOL.—On the 13th inst., Robert Nichol, M.D., of Denmark-hill, aged 48.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, OCT. 16TH, 1873.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Oct. 10	29·81	W S W	58	60	...	68	39	...	Overcast
„ 11	29·85	W.	58	60	...	62	57	1·35	Overcast
„ 13	29·62	N.E.	48	49	...	53	47	0·01	Overcast
„ 14	29·92	N.W.	42	44	...	54	40	...	Fine
„ 15	29·99	W S W	42	44	...	60	38	...	Foggy
„ 16	30·010	W.	44	45	...	56	41	...	Foggy

Notes, Short Comments, and Answers to Correspondents.

THE LATE MR. DONALD DALRYMPLE.

DR. PEDDIE, whose article in the *British and Foreign Medico-Chirurgical Review* on "Dipsomania" threw fresh light on the pathology and treatment of chronic alcoholism, while adding a new term to our nomenclature, vindicates the late Mr. D. Dalrymple's Bill against recent misrepresentations. Mr. Dalrymple did not, as the lay press puts it, propose to place habitual drunkards "in a lunatic asylum." On the contrary, his Bill was framed strictly on the recommendations of the Select Committee of the House of Commons of 1872 on Habitual Drunkards. The various clauses of his Bill most specially provide that all the arrangements necessary for the care and, if possible, cure of dipsomaniacs should be carried out "independently of, and distinct from, a Lunacy Law, Commissioners of Lunacy, or lunatic asylums." These clauses, moreover, were all carefully framed with every possible check to any undue interference with what might reasonably be considered as the liberty of the subject. The inaction of Government in taking up his Bill, according to Dr. Peddie, told heavily on Mr. Dalrymple's health, already impaired by family affliction, and too weak to resist his last illness. "It is earnestly to be hoped," adds Dr. Peddie, "that the cause to which Mr. Dalrymple so far successfully devoted the few last years of his life, at much personal expense and labour, and in spite of many discouragements from quarters where his views were misunderstood, will not be seriously retarded by his untimely removal." We cordially echo Dr. Peddie's hope. Some one of his late Committee will, we trust, be found to prosecute with energy the work which Mr. Dalrymple had so well begun, and carry forward in the next Parliament, if not the identical Bill, at least something like it. Its addition to the statute-book would be the best memorial of its able, upright, and philanthropic author.

Mr. Emerson, (Sunderland.)—We do not think he could be sued; but our correspondent had better take a legal opinion.

INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—In your issue of the 16th August last there is a statement to the effect that a surgeon of under six years' service in the Indian Medical Department receives pay at the rate of £45 a month, and that a surgeon with over six years' service receives £60 a month. The statement is not strictly accurate. The unemployed pay of a junior officer is £28, and after six years' service he receives £30. If employed—that is, if he holds an independent charge,—he may receive £10 additional; but he can receive neither £45 nor £60 unless he has been what is called confirmed in a post by the *patron* of that post. It is quite true the Secretary of State for India, in his advertisement bills, promised the higher rates of pay to officers when employed. But I have, on two occasions, held the sole charge of a regiment, and received nothing but my unemployed pay, and numbers of officers at the present time in charge of regiments and civil stations are not receiving the pay fixed for their respective appointments.

The explanation given will, I trust, enable you to correct the error in statement. It may also possibly enable officers entering the service to form a true estimate of what their income is likely to be in their first few years of service. The position of a junior medical officer is not one to be envied. He may for one, two, or more years be constantly kept moving from one station to another, and receive nothing but his unemployed pay (£28), unless he is happy in the possession of a powerful patron, or succeeds in uniting himself with a pretty wife, who does not much object to making herself agreeable to all the lackeys about a petty Indian Court.

I am, Sir, your obedient servant,

September, 1873. INDIAN MEDICAL OFFICER.

Dr. Peard.—It is impossible to keep lime-juice unless some antiseptic be added to it. Alcohol answers well, but sulphuric acid is more commonly used. No doubt the lime-juice in question had been preserved by sulphurous acid, the antiseptic power of which is well known. The reagent must, however, have been employed in undue quantity, judging from the description of its taste and smell given by our correspondent. A short exposure to the air in a warm place would remove the excess of sulphurous acid.

Food Analyst.—We believe our correspondent may now obtain of Dr. Hassall himself the instruction in chemical analysis he requires to become qualified for the post of food analyst or officer of health.

CONVALESCENT HOMES.

THE need of the Convalescent Home, to supplement the Hospital, and to crown the good work effected in the latter, is, we are glad to note, receiving increased recognition all over the land. Mr. C. Semon, J.P., has devoted a sum of money to the erection of a convalescent establishment at Ilkley, Yorkshire. The cost of the building, the designs of which have been already prepared by Mr. G. Smith, of Bradford, is estimated at £4500. The idea of the founder is that the Home shall not be in the nature of a charity merely, but that it shall be partly self-maintaining by means of the payment of small weekly sums by those who participate in its benefits, who will, moreover, be expected to assist, as they may be able, in the domestic work of the institution. The style of the edifice will be plain Gothic, and consist of two stories with an attic; it will have a frontage of 50 feet, and be carried back 130 feet, with a corridor through the centre. Most of the rooms will have two beds; others but one, for the use of any inmate who may suffer relapse. Ventilation will be secured on a new principle devised by Drs. Drysdale and Hayward, of Liverpool. The building will be constructed to accommodate sixty inmates, and will be erected on a site comprising six acres, fronting the Westwood Drive, Ilkley.

L'Homme (Dublin) is referred to Dr. Geo. Wilson's "Manual of Public Hygiene," where he will find satisfactory answers to his questions.

INFANTICIDE AS A FINE ART.

To the Editor of THE LANCET.

SIR,—The article in your journal of last week on "Infanticide," by Dr. Handsel Griffiths, reminds us that infanticide, generally a very vulgar proceeding, may rank among the finest of the fine arts, as the imagination must have been exercised to the uttermost to discover so refined a method of murder as that of penetrating the brain through the orbital plate of the frontal bone, and the pleasure of success must be great, considering the danger the operator incurs in achieving it. This refined method shows, moreover, that a fine art professor, and not a scientific and practical personage, was its author; for a scientific and practical man would not go out of his way to devise an elegant and doubtful method, while a measure at once consummately safe, simple, and effectual constantly thrusts itself under his notice. Who in our profession has not appallingly frequently met with instances of death by smothering? One time the story is that the little angel was fed, cozily tucked in its crib, kissed and blessed before its parent went wearily to sleep, but who on waking found the darling had turned over on its face and died! Another time it is that baby slept with its mamma, and having slipped down in bed, was found under the bedclothes in the morning—dead!

Now, what is the sane use of delicately manipulating a needle in a manner which never can happen without the most deliberate murderous intent, and which may fail in its object, when at midnight a pillow may be taken and pressed over the infant's face for a few minutes, and, when it has ceased to breathe, be taken up in the arms of the mother, and rushed about the house with, while everybody is told to run for a doctor, as baby is in a fit! What can the doctor do but state facts as he finds them, which usually are that the child was well nourished, and, apparently, otherwise well cared for; that the child died from asphyxia, which might easily have occurred accidentally in the manner narrated by the mother. No autopsy can disprove the statement that it was accidental; and can a coroner and his court declare their scepticism in the face of a weeping woman bereft of her beautiful babe! It is impracticable for a coroner who is abused by thoughtless and ignorant individuals for the expenses of his office to adjourn an inquest under such circumstances for proof of the legitimacy of infants or the character of parents; and in this vast metropolis, or in any large town, it is never expected that jurymen can have any personal knowledge of witnesses. "Accidental death from suffocation" is the usual verdict, and no more is heard of the matter. It is no exaggeration to say that such verdicts under such circumstances are almost daily recorded.

When will a life be as much valued as a few pounds' worth of property? If your chimney accidentally takes fire, notwithstanding every reasonable precaution having been taken to prevent it, you are by law fined a sovereign for the first offence. Why should not a baby accidentally smothered be held by law to be at least ten times more serious than a tolerably clean chimney accidentally on fire? I believe a ten pound fine for a first accidental baby-smothering affair would reduce infant mortality from suffocation at least 75 per cent., and would not probably be nearly so likely to affect the innocent heads of households as the Metropolitan Board of Works mulct of twenty shillings for a chimney fire.

I remain, Sir, yours, &c.,

October, 1873. J. HOLMES MORRISON, M.D.

J. P. S., (N.B.)—The *Globe* contains a letter signed "A Disgusted Subscriber," wanting to know what the Committee of St. Peter's Hospital have done with the £10,000 subscribed anonymously early in the present year. Nearly two years have elapsed since the Committee issued their last "annual" report.

Iatros, (Yarmouth.)—We know nothing as to the fate of Dr. Daremberg's magnificent medical library. No British Mæcenas came forward to save it from being scattered or enriching a foreign seat of learning.

A QUERY.

To the Editor of THE LANCET.

SIR,—This morning I shot a weasel, after having watched him running about for some time in a piece of swedes. On proceeding to pick him up, I found his intestines protruding rearward, and thought at first that they were torn out by the shot. On examining a little more curiously, however, I found the whole of the small intestines, mesentery and all, extruded from the anus, and no visible wound of the pelvis or abdomen. Will anyone explain this to me? I presume weasles are not in the *habit* of extruding their intestines when shot. I shall be glad to know if any of your readers have noticed similar behaviour on the part of any other animals.

Yours obediently,

Thame, Oxon, Oct. 6th, 1873. A SURGEON AND A SPORTSMAN.

THE INDIAN LOCUST.

THE *Indian Medical Gazette* for September contains an interesting paper on "Locusts," by Surgeon-Major W. J. Moore, in whose opinion the plague is becoming more constant than formerly. Their home appears to be the semi-desert district of Western Rajpootana. The Indian locust is called by Linnæus *Gryllus migratorius*, and measures when in full size three inches long, and one inch and a half round the body at its thickest part. There are two wings on either side—the upper ones more than two inches long, and a quarter of an inch wide; the lower ones shorter, but much broader, and triangular in shape. When at rest the lower wings are furled laterally beneath the upper ones; but when the insect passes through the air they move round like the sails of a windmill. In texture both wings may be described as a fine membrane stretched on a framework of hollow tubes. These tubes are circular and horizontal. Both upper and lower wings appear as if spotted with black or brown, owing to eight or ten tubes being darker than their neighbours. But the light colour of the connecting membrane is preserved throughout, and appears between the interstices of the blackened tubes. It is this peculiar appearance which enabled Mahomet one day to read on the wings of the locust the following words: "We are the troops of the Most High. We each lay ninety-nine eggs. If we were to lay a hundred we should devastate the whole world."

Dr. D. B. von Cavania.—We cannot reverse our opinion of the University in question on the strength of a private letter.

Justitia.—The question is a legal one; but we suspect there was no undertaking which would hold in a court of law.

THE VIENNA CONGRESS.

To the Editor of THE LANCET.

SIR,—In the article "Medical Congress at Vienna," which appeared in your valuable journal for September 20th, I was surprised to find several mistakes, which I trust you will permit me to correct.

1. The formal preliminaries terminated, not on the 3rd September, but on the first forenoon, and on the first afternoon and the 2nd September succeeded the discussions upon the subjects of vaccination and the prophylaxis of syphilis.

2. The number of members of Congress were not 300, but 200, comprising the representatives of the Governments of Russia, Austria, Prussia, France, Belgium, Saxony, Wirtemberg, Hesse, United States of America, Brazil, Egypt, Roumelia, Servia, Italy, Norway.

3. The number of the members who attended the daily meetings was not from 60 to 70, but from 200 to 300.

4. Cholera was not the subject of the first discussion, but that of the third.

5. During the discussion upon cholera, when I had the honour to preside, Dr. Schneider did *not* advance a very elaborate argument to prove that the disease is not necessarily epidemic. As the truth of such an argument is not denied by anyone, it was never advanced. Moreover, Dr. Schneider alleged that the intercourse with the sick is not the ontological cause of the spread of the disease (see the day-book of the Congress, p. 61), and consequently declared that land quarantines are useless (p. 63).

6. It is incorrect to state that in the debate upon the subject of cholera-quarantine no practical result was reached. The practical results were as follows: 166 votes against 14 agreed to abolishing land and river quarantines; 129 against 51 to maintaining for the meanwhile the sea quarantines; and lastly, 176 against 4 expressed their wish for appointing an International Commission for the purpose of studying the cholera-propagating agency, and consequently of eradicating this agency from the intercourse; lastly, of finding out better and surer protective measures than we have had hitherto.

The resolutions made regarding the quarantine establishments in general are as follows:—The time of quarantine observation is only to last as long as required for the inspection and disinfection of the vessel, the crew and the passengers. If the vessel has no sick on board, she is, after passing the process of disinfection, to be set free. In case of any sick on board, they are to be isolated, and the vessel with the cargo, after having been disinfected, is to be set free immediately. The regulations respecting the yellow-fever and the plague are to remain the same. The immediate problem regarding the quarantine establishments should be to put in force the above-mentioned resolutions without delay. It is recommended to appoint a permanent Commission for epidemic diseases, for the purpose of making an elaborate and thorough study of the persons subjected to quarantine inspection and of the cattle diseases. This Commission ought to work out sound principles for the sanitary laws. The want of such scientific principles was the principal cause of all the Cattle Plague and Cholera Conferences. For the purpose of attaining the desired aim, it is strongly recommended to appoint an International Committee of members accredited with full power by their respective Governments.

With regard to vaccination, it was agreed by 155 against 6 to introduce vaccination, and to recommend to the Governments compulsory vaccination.

Finally, it is to be noticed that the next International Medical Congress is to meet, not at London, but at Brussels.

I am, Sir, yours truly,
R. GUENTHER, M.D.,
Medical Councillor and Member of Cholera Commission
Dresden, Oct. 1st, 1873. for the German Empire.

J. W. H. H.—Medical appointments in the Peninsular and Oriental Company's service are entirely in the patronage of the Directors, a list of whom may be obtained at the offices of the Company, 122, Leadenhall-street. In addition to the above, the best mail lines are the West India, Cunard's, Inman's, the National, and Allan's, all these, except the first, trading between Liverpool and North America. Some of the telegraph cable ships carry medical officers, and are said to be very comfortable boats.

A Subscriber had better consult the Russian Ambassador. We have no certain information on the point.

LUNACY IN IRELAND.

THOUGH the population of Ireland has fallen away nearly two millions, the number of registered lunatics (according to the Inspectors' Report just issued) is on the increase. The total number of the insane is 18,177. Of these, 10,958 are registered. There are 7219 lunatics at large, whose free intercourse with society may be attended with serious consequences. Intermediate asylums are recommended, as they have been adopted in England. The lunatics in public asylums number 7140; in poorhouses, 2966; and in the central asylum at Dundrum, near Dublin, 175. The cost of maintenance is £23 per head in the district asylum, £11 in the poor-houses, and £32 in the central asylum. The inspectors deprecate magistrates abusing their power in committing persons alleged to be dangerous lunatics, and recommend that the practice should be checked, as it tends to increase taxation. The general management of the asylums, according to the inspectors, is satisfactory.

Y. C. C.—Next week.

Mr. P. R. Gourlay, (Guy's.)—Preliminary examinations became compulsory in 1858. Apprenticeship to a surgeon cannot be accepted as equivalent to having passed the "preliminary."

CARBOLISED OIL FOR MILITARY USE.

To the Editor of THE LANCET.

SIR,—A few years ago you were good enough to publish a short letter of mine, suggesting that the oil bottles carried by soldiers in their packs should be filled with carbolised oil in lieu of the ordinary oil used for rifles. I then said that I believed it would prove of equal value to the oil now in use for the rifles, as well as a useful and ready application to all kinds of wounds. I have since had some experiments made with carbolic acid (one part) and olive oil (nine parts), and find that the addition of the acid is actually an improvement, by tending to prevent rust more than the Rangoon oil now in use.

I have now to suggest that this carbolised oil be issued to the white soldiers going to the Gold Coast. If they are thus supplied, I believe that, in addition to having a most useful application for a wound, they will have what will be of signal service in warding off insects, and a good application for bites from scorpions, snakes, &c. A few drops of this oil (diluted with an equal quantity of any other oil) rubbed at night on the face and hands will also keep away mosquitoes and other insects.

Your obedient servant,
RICHARD WOLSELEY, M.D.,
Kilkenny, October 11th, 1873. Surgeon-Major, 5th Fusiliers.

Mr. J. S. Cobb, (Yarmouth.)—Barber-surgeons are now known in the less civilised of European countries only. Barber-dentists, it appears, flourish among ourselves. The "testimonial" should be referred to the Council of the Royal College of Surgeons. The recipient is not likely to profit much by an attestation which says: "I prefer natural or innate expertness to the originality of acquired tact or knowledge."

Dr. Mansfield.—We cannot insert advertisements which are not sent to us in the ordinary way. We shall be glad to hear that a proper appointment has been made.

A Subscriber.—1. The works of Brinton and Wilson Fox may be consulted with advantage.—2. We believe the Prudential Office takes the class of lives mentioned by our correspondent.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—Will you kindly assist me in this appeal to the medical profession by placing it in your journal. In so doing you will ever oblige.

Having been medical officer of the Swymbridge district nearly sixteen years (my appointment being an annual one), the Board of Guardians, without any notice or provocation, elected another medical man (five miles distant) at the expiration of the Michaelmas quarter. Being seventy-three years of age, with a delicate wife, I make this appeal to the medical profession, hoping I shall receive sympathy in my trouble by their subscribing whatever they may feel disposed in order to assist me towards my future succour, having nothing to fall back on, the salary having been so low. I appeal *in formâ pauperis.* Highly respectable gentlemen can testify to the truth of this assertion. Your obedient servant,

JOHN HAWKES JACKMAN.

Swymbridge, Barnstaple, North Devon, Oct. 14th, 1873.

Camellia Japonica, (Cardiff.)—The best dictionary for the British resident in Japan, especially if, being medical, he wants to know the Japanese equivalents for English scientific terms, is Dr. Hepburn's "Japanese and English Lexicon." A new edition has just been published; more than 3000 words have been added; and, according to H.B.M. Consul at Kanagawa, it "is eagerly sought for by both foreigners and Japanese."

Royal Navy, (Dundalk.)—We should imagine that the difference has been made undesignedly.

F. D. S., (Oxford.)—Primary fever has for the last few weeks been prevalent at Carthagena. The hospital is full, while the local supply of medicines is running short. Food also is scanty and poor.

Mr. J. H. P. Whitford, (Dublin.)—We cannot furnish private answers. Our correspondent might apply to Messrs. Moore and Co., 14A, St. Mary-axe, E.C.

Y. C. H. does not state whether the first sent for was the patient's usual medical attendant or not. Let our correspondent put the case a little more in detail.

LINCOLN COUNTY HOSPITAL.

WE purpose discussing next week the very important subject of the expediency of rebuilding this hospital.

Samaritan, (Willesden.)—Hospital Sunday has had to encounter the "red-tapeworm"—a parasite for which we have not yet found the appropriate anthelmintic. The Royal Albert Lunatic Asylum was entitled to a proportion of the proceeds of the Hospital Sunday collection at Manchester; but its claim was overruled on the ground that the asylum was not a Manchester hospital. It was proved (too late, however) that the institution belonged to each and every part of the seven northern counties, and that Manchester derived direct and substantial benefits from its admitting patients as freely as if it were situated in Manchester.

Mr. Arthur C. Procter, (Macclesfield.)—The report of the Lunacy Commissioners on Mrs. Petschler's case shall receive full consideration next week.

Adsum, (Plymouth.)—Accurate information as to the conditions under which the English medical man can practise in Brazil and on the River Plate may be had of the Secretary of the South American Club, 34, Great George-street, Westminster.

THE CLIMATE OF SOUTH AUSTRALIA.

To the Editor of THE LANCET.

SIR,—I should feel thankful to any of your readers who have had the opportunity of knowing, if they would kindly furnish me with their experience of the climate of Australia, I mean more particularly in the neighbourhood of Sydney and Melbourne; also the chances of success a young, unmarried surgeon would have in either of those cities. I may mention that I have got friends in both cities, so that I should not go out entirely as a stranger. I should also like to know the scale of fees, and any other information bearing on the subject will be thankfully received by,

Your obedient servant,

October, 1873. INQUIRER.

Jacobite, (Tuam.)—The Carlists are not badly off for surgical attendance. According to a Prussian officer who had visited their hospitals after the successful engagement at Estella, "the wounded men were admirably looked after." The ambulances (the Carlists have such things) were clean, and the surgeons seemed to him skilful and well acquainted with their profession.

Sussex.—We regret that it is beyond our power to afford the required information. Let our correspondent avoid all advertising dentists, and place himself in the hands of some well-educated, reliable man, which he will have no difficulty in doing.

Historicus.—Dr. John Caius (or Kaye) was for several years President of the College of Physicians, and held the office of physician to the Court during three successive reigns. His doctorate was, we believe, obtained from Bologna.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir James Paget, London; Dr. Rutherford, London; Dr. Harley, London; Dr. J. B. Hicks, London; Mr. Erichsen, London; Dr. Taylor, Nottingham; Mr. Roche, Ipswich; Dr. Winn, London; Dr. M'Kenzie, Batley; Dr. Iliff, Walworth; Dr. McCall, Polmont; Mr. Deacon, Knighton; Dr. Wolseley, Kilkenny; Mr. Crombie, Brompton; Mr. Wells, Northampton; Mr. Symons, Leigh; Dr. Campbell, Liverpool; Mr. B. Owen, Poole; Mr. Gourlay, London; Mr. King, Derby; Mr. Jackman, Barnstaple; Mr. Crook, Great Bowden; Dr. Booth, Church; Mr. Evans, Chester; Mr. B. Wrightmann, Brussels; Mr. Smith, Saltburn; Mr. Young, Bridgwater; Mr. J. Charles, Liverpool; Mr. Looker, Great Yarmouth; Mr. Colman, Manchester; Mr. R. Harris, Redhill; Mr. Anson, Tooting; Mr. Wardell, Exeter; Dr. Platt, London; Mr. Weston, Sheffield; Mr. Hinton, Newport; Dr. Harbinson, Kilkeel; Mr. Whitfield; Mr. Binn, Fentimara; Mr. Graves, Spalding; Mr. Peate, Stafford; Dr. Chaumont, Woolston; Mr. Pritchard, Clavering; Mr. Bruce, Lowell, U.S.; Mr. J. Maynard, Basingstoke; Mr. G. Anderton, London; Mr. Searson, Manchester; Mr. Roche, Kingstown; Mr. Elliott, Leamington; Dr. Morrison, London; Mr. Collins, Bexley; Mr. Sogeon, Seacroft; Mr. Walker, Richmond; Mr. J. Laxton, Ludlow; Mr. Cobb, Yarmouth; Dr. Gill, Dover; Mr. Gray, Faversham; Mr. Chapman, Kidderminster; Mr. Hanbury, London; Mr. Bernhard, Darlington; Mr. Hadley, Mansfield; Mr. James, Wellington; Mr. Brookhouse, Paisley; Mr. Edgworth, Edinburgh; Dr. Hoare, Titchfield; Mr. East, Newcastle; Mr. Manby, Okehampton; Mr. R. D. Shield, Buckingham; Dr. Gamgee, Manchester; Mr. Hitchcock, London; Mr. Bennett, Worksop; Mr. Main, Newcastle; Dr. Redwood, Rhymney; Mr. Wyburn, Hull; Mr. R. Canfield, Bromley; Mr. W. Spencer, Ashford; Mr. Allman, Tottenham; Mr. R. Craven, Abergavenny; Mr. Sturt, Belfast; Mr. Woodman, Melbourne; Mr. Kesteven, Burnley; Mr. Burnes, Halifax; Mr. Purkiss, Taunton; Mr. Macgregor, Balloch; Mr. Deacon, Worksop; Mr. Emmerson, Seaham; Mr. Pulman, Walton; Mr. Wilson, Caterham; Mr. Calthorp, Binfield; Mr. Sympson, Lincoln; Mr. Gentles, Derby; Mr. Bulmer, Hastings; Mr. W. Jackson, Ashford; Mr. Rye, Leckhampton; Mr. J. Braine, Bradford; Dr. Latham, Cambridge; Mr. Jones, Sleaford; Dr. Cassels, Glasgow; Mr. J. Grinnel, Liverpool; Mr. Ransford, Swansea; Mr. Fawcett, Dolgelly; Mr. Mann, Ipswich; Mr. Rose, Salford; Mr. Ince, Rawalpindi; Mr. Brown, London; Dr. Radford, Manchester; Inquirer; O. P. O.; A Country Practitioner; A Medical, not a Relieving Officer; J. W. H. H.; A Constant Reader; Senex; A. Z.; A Subscriber; The Editor of *Nature*; M.C. & M.B. Edin.; Late Assistant-Surgeon R.N.; Indian Medical Officer; Nil Desperandum; T. C. H.; &c. &c.

Lancaster Guardian, Leeds Times, Birmingham Morning News, Eastern Daily Press, Manchester Evening News, South London Journal, Lincoln Gazette, and *Isle of Wight Journal* have been received.

Medical Diary of the Week.

Monday, Oct. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations on the Eye, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON (11, Chandos-street, W.) — 8 P.M. Dr. Richardson, "On Organic Stricture of the Œsophagus: a Recast of Clinical Observation."

Tuesday, Oct. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Traumatic Separation of the Epiphysis of the Great Trochanter; Recent Fracture of the Atlas and Odontoid Process of the Axis; Foreign Body in the Crico-Thyroid Pouch; Traumatic Degeneration of the spinal Cord; Aneurism of the Aorta, forming a large external Tumour; Large Hydatid Cyst of the Liver; Obstruction of the Common Bile-duct; Two Specimens of Diseased Liver; Photograph of a remarkable Vesical Calculus; Psammoma of the Dura Mater; &c. &c.

Wednesday, Oct. 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Oct. 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
HUNTERIAN SOCIETY. — 8 P.M. Mr. M'Carthy: A Specimen of Imperforate Anus and Colles' Fracture.

Friday, Oct. 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Oct. 25.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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